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CITY OF MANCHESTER EDUCATION COMMITTEE

ANNUAL REPORT

OF

THE SCHOOL MEDICAL OFFICER

(Dr. HENRY HERD)

1938

Education Offices, Deansgate
Manchester

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TABLE OF CONTENTS

Page

After-Care of Mental Defectives 57
Blind, Deaf, Defective and Epileptic Children 55
Child Guidance Clinic 64
Co-ordination 12
Co-operation 74
    Parents 74
    Teachers 74
    Attendance Officers 74
    Voluntary Associations 74
Day Continuation Schools 71
Diastolisation — Special Report by Mr. Brian P. Robinson, M.B., CH.B., F.R.C.S. (Edin.) 19
Employment of Children and Young Persons 72

Following-up —

    Methods of 41
    Uncleanliness 14
    Cases not being fully treated 43
    Rotas 43
    Prosecutions 43
Infectious Diseases in Schools 48
Junior Technical Schools 71
Lancasterian Day Special School for Crippled Children 60
Lancasterian Old Scholars' Guild 62
Malnutrition 13
Medical Inspection —
    Findings of 13

Medical Treatment — School Clinics

    Adenoids and Enlarged Tonsils 18
    Defective Vision and Squint 17
    Dental Defects 35
    Ear Disease and Defective Hearing 19
    Ear Disease : Ionization 19
    External Eye Disease 17
    Heart Disease and Rheumatism 38
    Impetigo 16
    Nose and Throat Defects 17

Medical Treatment — *continued* *Page*
  Orthopaedic and Postural Defects 36
  Skin Diseases 15
  Ringworm 16
  Scabies 15
  Other Skin Diseases 17
  Tuberculosis 40
  Ultra-Violet Rays 43
  Uncleanliness 15
  X-rays 16
Nursery Classes 69
Open-Air Education
  Residential Schools :
    Dr. Rhodes' Memorial Home 59
    Styal 58
    Summerseat 58
    Soss Moss 58
  Crumpsall Day Open-Air School 58
Operative Treatment 18
Parents' Contributions 74
Physical Education 49
Provision of Meals 54
Remedial Exercises 37
Rheumatism — Special Report by Dr. Honeyburne 38
Scholarship Candidates — Medical Examination of 73
School Camps 68
School Hygiene 12
Secondary Schools 71
Special Reports .. .. 19 and 38
Staff 3
Speech Defects 47
Supervision of Ailing Children 41
Statistical Tables 76–92
Styal Cottage Homes 68

LIST OF STATISTICAL TABLES

Table I

Page
A Routine Medical Inspections 76
B Other Inspections 76
C Children found to require treatment 76

Table II

A Return of Defects found —

Elementary Schools 76
Secondary Schools 82
Day Continuation Schools 85
Nursery Classes and Schools 89
B Classification of the Nutrition of Children inspected in the Routine Age Groups 78
Copy of Form 307 M — Mental Deficiency (Notification of Children) Regulations, 1928 78

Table III

Return of Exceptional Children in the Area 78

Table IV Treatment :—

ELEMENTARY SCHOOLS

Group I Minor Ailments 80
Group II Defective Vision and Squint 80
Group III Defects of Nose and Throat 81
Group IV Orthopaedic and Postural Defects 81
Group V Dental Defects 81
Group VI Uncleanliness and Verminous Conditions 81

SECONDARY SCHOOLS

Group I Minor Ailments 83
Group II Defective Vision and Squint 84
Group III Defects of Nose and Throat 84
Group IV Orthopaedic and Postural Defects 84
Group V Dental Defects 85

DAY CONTINUATION SCHOOLS

Group I Minor Ailments 87
Group II Defective Vision and Squint 87
Group III Defects of Nose and Throat 88
Group IV Orthopaedic and Postural Defects 88
Group V Dental Defects 88

NURSERY SCHOOLS

Group I Minor Ailments 90
Group II Defective Vision and Squint 91
Group III Defects of Nose and Throat 91
Group IV Orthopaedic and Postural Defects 91
Group V Dental Defects 91

SPECIAL SCHOOLS

Group V Dental Defects 92

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J. G. Woolham, M.D., CH.B., D.P.H.

Specialist Officers:

Consulting Orthopaedic Surgeons: *E. D. Telford, F.R.C.S., M.SC.
*Harry Platt, F.R.C.S., M.S.
Consulting Ophthalmologist : *Harry V. White, M.C., M.D., CH.B.
Consulting Surgeon (Nose and Throat) : *Brian P. Robinson, M.B., CH.B., F.R.C.S. (EDIN.)
Psychiatrist and Medical Director of Child Guidance Clinic : *W. Mary Burbury, M.A., M.B., B.S., D.P.M.

School Dental Surgeons :

B. C. Betts, L.D.S.
B. Brown, L.D.S.
A. L. Craggs, L.D.S.
H. J. Eagleson, L.D.S.
G. G. Ellis, L.D.S., R.C.S.
S. B. Fillingham, L.D.S.
†V Higham, L.D.S.
Mary M. Peacock, L.D.S.
Jessie I. Ramsden, L.D.S.
Elizabeth Timperley, L.D.S.
J. Whitehouse, L.D.S.
*S. Wood, L.D.S., R.C.S.

School Nurses :

Superintendent Nurse : Miss K. S. Torrop

Nurse Barker
Barnes
Barton
Bertie
Blackburn
Blackham
†Blezard
Broderick
Clunan
Collinge
Dickson
Farley
Fitzpatrick
Fox
Gibbs
Harrison
Haugh
Hetherington
Humphries
Jackson
E. Jones
E. Lloyd Jones

Nurse F. M. Jones
M. M. Jones
Lewis
Lowry
Maguire
Mason
Maxwell
McEntyre
McGrath
McHugh
McIntyre
Meech
Miller
Moss
Nicholson
Nixon
Noden
Owen
Palin
Parry
Pierce-Jones
Prince
Ramsay

Nurse Rhodes
†Richings
Robinson
Rothera
Salvidge
Schofield
Shannon
Shout
Stanley
Stephen
Sternshine
Sullivan
Terry-Jones
Tomlinson
Underwood
Waine
Walker
Walton
Ware
West
Whetston
Whicher
Wright

* Part time duty
† Resigned during 1938

Dental Attendants:

Miss P. Davies
Miss I. Dean
Miss H. Hallewell
Miss E. G. Pearson
Miss J. B. Ryder

Principal Administrative Assistant : Harry Robinson

Administrative Assistants : Arthur Dunks, Harry Hinsley, George A. Hawley

Clerks:

George Webb
Arthur Chandler
John Dickinson
Thomas Brown
†Norman Shirt
Norman Leigh
James M. Robinson (B.A. ADMIN.)
A. Victor Shaw
A. Roberts

Agnes Roscoe
Emma Haslam
Kathleen McEwen
Agnes L. Edgar
Edna Jackson
Constance Walford
Ethel Durrant
Elizabeth Hallard
†Doreen M. Ferneley
Edith M. Sidebotham

Marjorie Poole
Olga Painter
Hilda Williams
Clarice Green
Jessie Ellison
Beryl Hargreaves
Joan Simpson
Doreen Arnold
Marguerite Tulk

ORTHOPAEDIC CLINIC — GOULDEN STREET

Superintendent Masseuse : Miss B. L. Ashworth
Masseuses : †Miss H. Heywood, Miss M. C. Holderness, Miss Roberts, Miss Stout
Nurse : Miss W. Johnson
Nurse Attendants : Miss L. Shaw, Mrs. Hughes

CHILD GUIDANCE CLINIC

Enquiry Officer : Miss B. J. Spedding, B.A.
Psychologists : *Mrs. E. Henshaw, B.SC.
*William J. Messer, M.A., M.SC.

* Part time duty † Resigned during 1938

RESIDENTIAL SCHOOLS :

Summerseat Open-Air School for Delicate Girls	Summerseat, near Bury, Lancashire
Soss Moss School for Epileptic Children	Chelford, Cheshire
Manchester Residential School for Crippled Children (Dr. Rhodes' Memorial Home)	Cavendish Road, Didsbury
Manchester Residential Open-Air School for Delicate Boys and Girls ..	Styal, Cheshire

NON-RESIDENTIAL (DAY SPECIAL) :

Lancasterian School for Crippled Children	Goulden Street, Oldham Road
Crumpsall Day Open-Air School for Delicate Children	Middleton Road, Crumpsall

SCHOOL CLINICS :

Ancoats	Cannel Street, Ancoats
Butler Street (Dental)	Butler Street, Ancoats
Central Clinic	Education Offices, Deansgate
Cheetham	Corner of Smedley Street and Cheetham Hill Road
Gorton	Gorton Road, West Gorton
Johnson Street (Dental)	Johnson Street, Bradford
Lancasterian (Orthopaedic)	Goulden Street, Oldham Road
Levenshulme	Stockport Road, Levenshulme
Moston	Moston Lane, Harpurhey
Newton Heath	Pilling Street, Oldham Road, Newton Heath
Northenden	Northenden Municipal School, Bazley Road, Northenden
Openshaw	1,460 Ashton Old Road, Hr. Openshaw
Shakespeare Street	69 Shakespeare Street, Chorlton-on-Medlock
Stretford Road	263 Stretford Road, Hulme
Child Guidance Clinic	Atherton Street School, Deansgate

PREFACE

The School Medical Officer submits in the following pages the Report on the work of his Department during 1938.

In the latter part of the year the Education Committee, on the recommendation of the School Medical Officer, decided to appoint a Senior Dental Officer, and in due course selected Mr. A. G. Batten, L.D.S., who had formerly occupied a similar post at Stoke. He commenced his duties in January, 1939.

Dr. Ruby Winning retired from the staff during the year because of her marriage, and she has been replaced by Dr. Hugh Craig, formerly an Assistant S.M.O. at Preston, who commenced his work here in January, 1939.

As this is the last Annual Report for which the present School Medical Officer will be responsible, he has taken the opportunity in the body of the Report to offer certain observations on the service in general. He desires, however, to express here his deep appreciation of the loyal service and help he has had in his years of office from all sections of his Staff, professional and administrative, and also of the ready co-operation and assistance of other officials of the Education Committee, with whom his work has necessarily brought him into close contact.

INTRODUCTION

It is perhaps not inappropriate that at the end of his tenure of office, a School Medical Officer should make a few general observations on the service.

1. First of all a few words may be said about recent developments of the service in Manchester. Prior to Dr. Ritchie's retiral in 1930, the service here had reached a high stage of development and efficiency for its purpose. It was not without significance that the first Refresher Course for School Medical Officers arranged by the Society of Medical Officers of Health about 3 years ago was held in Manchester.

During my term of office, there have been certain routine developments, e.g., additional clinics with the necessary staff which are designed to make the service more readily available for the school population. Other alterations and additions have been designed rather from the point of view of efficiency. Of these is the arrangement with the Public Health Committee by which children requiring operation for tonsils and adenoids have the benefit of hospital care. The appointment of an Aural Specialist has made a material difference, as the text of this report shows, to the effectiveness of treatment of ear conditions. On this point I would emphasize particularly that an Aural Specialist in a School Medical Service should not be merely one to whom urgent, difficult or long-standing cases are referred, but should periodically visit each clinic, and supervise the whole treatment of cases of Ear Disease. This is the method which has been adopted with marked success in Manchester, and it is a fitting supplement to the scheme that any ear case found to require operation can now by arrangement with the Public Health Committee be operated on in one of its Hospitals by our own Aural Surgeon.

Another recent appointment has been that of a Senior Dental Officer, made necessary by the increase in the dental staff and by the further increases which will soon have to be made if the dental service is to be available as obviously it ought to be to every child in the City.

A new departure in recent years, and a necessary one, has been the inauguration of the Child Guidance Clinic, or rather the incorporation of the existing Child Guidance Clinic, opened by an enthusiastic voluntary Committee four years previously, but always sadly hampered by lack of funds. This Clinic is now part of the Education Service, and one of the sections of the School Medical Department. In view of the great importance now attached to mental and particularly emotional conditions in the causation of disease both in adults and children, such an addition to the service was inevitable, and it is one with large possibilities of development in the future.

2. This is not the place to discuss the relation of the School Medical Service to the General Public Health Services. Obviously, at the least, they cannot but be closely associated if not actually affiliated. Whatever is the actual relation existing between them in any one area, however, the

School Medical Service can never be a purely medical service, but must be very closely identified with the general educational service. The general practitioner can in an individual case of disease or defect only certify a child as "not fit for school," but the School Medical Officer has to consider whether there may not be some school or class which this child may attend, without prejudice to his ailment. Presence of certain types of disease or defect does not necessarily debar from education. To deprive such a child of healthy mental activity may be both physically and psychologically harmful to the child. All this will be readily admitted in the case of the markedly handicapped child — the blind, the deaf, the partially sighted, the partially deaf, the mentally defective, the epileptic (if not too severe), and most of the larger Education Authorities make suitable educational arrangements for some at least of these groups. It is perhaps, however, not so readily accepted by parents or even by the medical profession that even children who are anaemic or otherwise debilitated may be suitably dealt with in schools of open-air type with modified educational arrangements. Education after all is not merely acquisition of knowledge, a process which may drain unduly the strength of a debilitated child. The cultivation and guidance of capacity, which is the intellectual aspect of true education, need not be a physically dangerous process. Too many children have in the past been debarred from School on the plea of "nervous debility," often with detrimental results on their own physique and character, resulting from the deprivation of healthy cerebral activity. Nervous debility (so called) is often a sound reason for keeping the child in school. The selection of debilitated children therefore for this special service, and the supervision even of the educational work is part of the function of a School Medical Officer.

3. During the last few years much of the interest of the School Medical Service has been focussed upon the question of Nutrition. To the repeated assertions — often of political origin — that malnutrition was prevalent among children, the School Medical Service has been expected to give a reply, confirmatory or otherwise. The figures for the whole country show only a little over 6 per cent. of children to give evidence of subnormal nutrition, but the method of assessing nutrition has been proved to be notoriously uncertain, and standards adopted by different medical officers admittedly vary enormously.

The controversy, however, has had two consequences, both of them beneficial. One is that it has called attention to the desirability of discovering some method of assessing the child as a whole as apart from the mere recording of defects and diseases of individual organs. It is possible, for example, for a child to present no signs of organic disease in heart, lungs, blood, etc., and yet be far from well — a fact indicated only by his complaints or by such symptoms as lassitude. A child, in fact, can be completely assessed physically not merely by the signs of disease discoverable by the methods open to medical science, but only when these are supplemented by functional tests, tests of his ability to carry out certain procedures which indicate the amount of energy he possesses. Much experimental work in this direction has been, and is being carried out, work in which our Manchester Service has played no unimportant part.

The second good result of the Nutrition controversy is that it has stimulated an interest in the subject of food values in their relation to health. Adequate feeding, if not a complete guarantee of health, is at least an indispensable condition of health. There are, of course, individual idiosyncracies in regard to food (I am not referring to food fads) even among children, but on the average the necessities in food for children of various ages are known, and diets can be advised accordingly. Education in food values and in the art of cooking and even the art of non-cooking is a necessity. To some extent this necessity is being met by teaching in Senior Schools, and in classes after school age, but the movement leaves still great room for development. I am convinced that much of the indefinite ill-health and debility of which evidence is found in some children has its source either in the inability on account of poverty or wrong distribution of expenditure to obtain it, or in ignorance of the right foods to purchase and of the right way of dealing with them when purchased. The severer degrees of malnutrition are to-day undoubtedly rare, but slighter degrees are not fully represented in officially published figures.

4. In several previous reports I have suggested that some reform of the system of Routine School Medical Inspection is desirable, and the subject has been debated both at meetings of the Royal Sanitary Institute, and of the Society of Medical Officers' of Health. Medical Officers are still divided on the subject, but I have sometimes found the arguments advanced by my opponents strengthen my own convictions. The Routine system means to-day that every child is examined in school three times in his school life — at entrance, at 8 and at 12. When School Medical Inspection commenced there was no examination at 8. Reform of the Routine system does not mean its entire abolition. The full medical inspection at entrance is obviously necessary, as the child comes to us then as a stranger. The examination at 12 is probably to some degree unavoidable in view of the requirement of the Board of Education that for each child a form should be filled up indicating if there is any type of employment for which the child is not fitted. This form, however, I hold should not be filled until a date nearer to that of the child's leaving school, and if the method of regular supervision advocated were adopted, a full routine examination would not then be necessary.

There are several points of criticism of Routine Inspections — (*a*) If they are of value, then the intervals between them are too long. (*b*) Routine inspections after the first (the entrants) bring to light an exceedingly small number of defects whose existence is not already known. The habit of reference to clinics between Routine Inspections of children with various troubles by teachers or parents has grown to so great an extent that the Routine Inspection is often superfluous. "Special" inspections as these cases are called now greatly exceed routines. (*c*) If school medical work is to be efficient, it demands a more continuous observation of children than is afforded by three inspections at intervals of 3 or 4 years.

This last-mentioned fact has received practical recognition in various directions in recent years. (1) In cases of defective vision the Board of Education insists that every child found once to have bad sight should be examined every 12 months. This amounts virtually to a supersession of Routine Inspection so far as this defect is concerned. (2) Then in regard to nutrition, the Board now asks for nutrition surveys of *all* children at each visit of the Doctor to the school — i.e., at intervals of 6 or 12 months. (3) Heights and weights, too, taken at 3 and 4-yearly intervals tell us nothing. Taken at 6-monthly intervals, as in London County Council Schools, they can be of real value. (4) Routine Inspection has also failed to discover children with slighter degrees of deafness requiring treatment. The Gramophone Audiometer, which cannot be used in the course of Routine Inspection, has revealed a large amount of deafness of varying degrees, hitherto unsuspected.

Coming now to concrete suggestions, which must be stated only briefly, it is proposed that for the period between the entrant and the leaving examination, there should be a visit once each term by the Doctor. Apart from his visit, however, and supplementary to it, there should be 6-monthly (3-monthly in Infants) measuring of height and weight, a yearly test of vision by the card by the Nurses, and at such intervals as can be arranged, probably 2 or 3 years, a Gramophone Audiometer test.

At the Doctor's visit he would see :—

(1) all children who at former visits had evidence of defect or disease or lack of adequate growth.

(2) children whose height and weight record was not satisfactory.

(3) children absent from school for long periods or at frequent intermittent periods. For this purpose the Doctor should study the school registers.

(4) children referred by teachers or parents for a variety of reasons : pallor, listlessness, fatigue, breathlessness (shown, say, in P.T.), or failure of mental or physical alertness, or children suspected of being mentally defective.

(5) the Doctor should survey the children in groups or in their classes, or at play or in a P.T. lesson, and pick out children with obvious faults : the pale, the stunted, children with bad posture or gait, with adenoid symptoms. At some visits special search can be made for throat and nose ailments, or for spinal curvatures and other deformities.

On such a system I feel confident that the Medical Officer would keep more closely in touch with *all* the children during their whole school career than is the case at present. I have been met with the criticism that too much would be left to the initiative of the individual Doctor : that, in my opinion, is one of the merits of the scheme. I venture to suggest that the Board of Education should agree to some such scheme being tried out in parts of some urban areas in the first instance.

REPORT

CO-ORDINATION

The work of the School Medical Department continues to be closely co-ordinated with that of the Public Health Department of the City. Any matter arising amongst school children, which might affect the health of the community in general, is brought to the notice of the Medical Officer of Health.

For many years there has been a constant interchange of information between the two departments concerning the occurrence of infectious diseases, tuberculosis, scabies, persistent infestations of vermin. In the treatment of scabies, the Public Health Department has treated school children when the occasion has suited the particular family, and, on the other hand, the School Medical Department has treated cases occurring in children under the age of five years, or in female adults when this arrangement has best suited the families concerned.

It has been the practice for many years for the Maternity and Child Welfare Section of the Public Health Department to forward particulars of every child on attaining the age of five years, when the child has suffered from some condition which may affect it in later years, or which required immediate treatment. If any condition requires immediate treatment when a child has reached the age of five years, the matter is immediately taken in hand by the School Medical Department, and treatment insisted upon. If the case is one where treatment can be provided at a school clinic, this course is suggested if the parents do not wish to consult the family doctor or to attend at a hospital or dispensary.

During the past year an arrangement came into operation whereby the Maternity and Child Welfare Department can refer to school clinics for treatment children in attendance at the Welfare Centres who are found to be suffering from impetigo, ear disease, or squint, for which the Public Health Committee pays a certain sum for each case, irrespective of the length of time any particular case is under treatment. The services of the Consultants in Eye Defects or Ear Disease, employed by the Education Committee, have, therefore, become available for children below school age. The value of obtaining treatment at such an early age cannot be denied and the response of the mothers has been gratifying.

SCHOOL HYGIENE

The question of the hygiene of the schools is one that is always under close supervision. On the occasion of the routine medical inspection, the premises, lighting, ventilation, furniture, playgrounds and lavatories, are subject to a special inspection and report. Any matter considered to require attention is reported to the Director of Education.

FINDINGS OF MEDICAL INSPECTION

The number of children fully examined in the routine age groups during 1938 was 31,712 — 10,750 of these were from the entrants group, 8,552 the eight year old group, and 7,303 the twelve year old, with a residue of 5,107 composed of children of four and five re-examined after entrant examination at three, or central school children. Special inspections, which are made up of cases of other than routine ages seen by request at the schools, or children of any age sent for a specific reason to a clinic to be seen by a doctor, totalled 62,896.

The numbers and percentages of children found to require treatment at the routine ages are recorded in the following table. The figures, however, do not include defective vision (of which in entrants the records are necessarily incomplete), uncleanliness and dental diseases which are recorded elsewhere.

	Number examined	Number requiring treatment	Percentage requiring treatment
Entrants ..	10,750	2,450	22.8
8 years	8,552	1,530	17.8
12 years ..	7,303	1,078	14.7

There is thus a definite improvement as age advances.

So far as defective vision is concerned, there is only a negligible difference between the percentage at eight years requiring treatment — 8.06 — and at twelve years, 7.84. This does not imply that there is a neglect to obtain correction of the visual defect by glasses : a visual defect though corrected by glasses is still a defect and counts as such statistically. The figures quoted in the table above are much more significant and show how considerable is the improvement in physical condition as the children pass through the schools.

DETAILED FINDINGS

(*a*) MALNUTRITION

Assessment in respect of Nutrition of all children examined in the course of Routine Medical Inspection was continued as in previous years. The following Table shows the results together with the corresponding figures for 1937 :—

		1937	1938
Number examined		32,830	31,712
Percentage	A (excellent)	19.32	19.26
	B (normal)	72.58	72.29
	C (slightly sub-normal)	7.97	8.37
	D (bad)	.13	.08

The differences from last year, as it will be seen, are immaterial.

Enough has been said in previous reports of the unsatisfactory character of the clinical method of assessment, and the last Medical Report from the Board of Education fully admits its fallacies. The further criticism is sometimes made that the word "normal" above only means "average" and that an average state of nutrition is bound to be below what is desirable, and cannot be regarded as an ideal. It is contended, therefore, that only those children in the "A" class can be regarded as satisfactorily nourished and that the others should be counted as "subnormal". On this supposition then, only 19 per cent. of Manchester school children would be regarded as in a satisfactory state of nutrition, a statement to which none of the Medical Officers concerned would agree.

There are only two possible methods of assessing a child's nutrition. One is an actual study both of the quality and quantity of food taken by the child — an extremely difficult enquiry to carry out. The other is an estimation of income available for food in the family for each person, and a comparison of that with the expenditure necessary to ensure an adequate food supply.

A comparison of the different age-groups in respect of nutrition is interesting. The figures are given in detail in Table II B. The percentages are as follows :—

	A — Excellent	B — Normal	C — Slightly sub-normal	D — Bad
Entrants	20.08	71.78	8.06	.08
8-year olds	15.06	74.24	10.59	.11
12-year olds	19.22	73.13	7.6	.05

It will be seen that the 8-year old groups show the worst results. This reflects the effects of infection and other catarrhal disease upon children between the entrant age and the age of 8.

During the year nutritional surveys of all the children in elementary schools were carried out as time permitted, with the object chiefly of discovering marked cases of malnutrition. Out of 62,782 seen, only 19 such cases were found. Relatively, therefore, cases of malnutrition are rare.

(*b*) UNCLEANLINESS

The question of uncleanliness amongst school children has again, as in all former years, received particular attention from the school nurses.

Owing to the appointment of a number of Dental Attendants, the actual staff of nurses available for school and district work has been augmented and, consequently, much more supervision of the children in the schools has been possible. Visits to the homes, both on account of an unsatisfactory state of cleanliness and general medical treatment, have been more regular and also at shorter intervals.

The total number of cases of uncleanliness under supervision during the past year was 11,502, as compared with 12,975 during the previous year, showing a decline of 1,473 cases.

At the end of the year 9,976 cases had been removed from the nurses' lists as being completely clean. This is equal to a percentage of 86.7 having been cleansed during the year.

In last year's report it was stated that it was hoped that more attention would be paid to the question of uncleanliness consequent upon the reorganisation of the nurses' work and additions to the staff. This has proved to be the case. During the past year each school has had an average of sixteen visits paid to it during the year, compared with twelve in the previous year, and the number of inspections was 279,203, compared with 252,886 in the year 1937, an increase of more than 26,000.

It has always been the opinion of the School Medical Officer that uncleanliness amongst school children may only be satisfactorily controlled if the visits of the school nurses are persistently carried out. This appears to show itself in the high percentage of cases which were made clean during the year.

It was found necessary to cleanse 11 children compulsorily during the year, and in 159 instances parents submitted their children for voluntary cleansing at the school clinics.

(*c*) MINOR AILMENTS

Skin Diseases

The incidence of skin diseases amongst school children during the year shows very little difference to last year.

The change in the method of recording the statistics now required by the medical department of the Board of Education makes it difficult to compare the number of new cases discovered during the year with the number discovered during the previous year as all cases known, including those carried forward for further treatment from last year, are included in the table of findings of medical inspection. During the year 1938 there were 10,997 cases of all types of named skin disease known to the Authority and of these all except 19 were considered to require treatment. There were, however, 10,978 cases of skin disease requiring treatment and at the end of the year 10,925 had received the necessary treatment or were receiving treatment. Of this total 10,619 were treated at the Committee's school clinics and 306 obtained their treatment elsewhere. Therefore, 97.2 per cent. of the cases received their treatment at the school clinics.

The particulars of each type of skin disease will be given under its own heading.

Scabies

The prevalence of this disease continues to be somewhat troublesome. There were 1,149 cases of scabies known last year and all received treatment during the year. This total is 242 greater than in the previous year. It is remarkable how this disease has persisted year by year since the termination of the Great War. Every effort is made to discover cases in school and all those ascertained are immediately put under treatment. Whenever a case becomes known particulars are at once telephoned to the Public Health Department in order that the home may be visited and cases amongst other members of the family not of school age disclosed. The Public Health Authority then arranges for the treatment of any person found to have the disease and simultaneously the bedding is taken to the Cleansing Station for disinfection.* In spite of all efforts to discover the cases as early as possible and to arrange for immediate treatment, the disease has continued to show no diminution from year to year.

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* The personal clothing of all cases, both child and adult, is disinfected whilst the first treatment is in progress and again when the patient is cured.

Ringworm

The number of cases of ringworm known was 107. Of this total 9 were affections of the scalp and 98 affections other than the scalp.

(1) *Ringworm of the Scalp*

Four of the cases were treated by X-rays, two under the authority's scheme and two otherwise. The remaining five were treated under the authority's scheme by other methods.

Dr. Oswald Taylor and Dr. L. W. Sparrow undertake the treatment of cases of ringworm of the scalp at the Central Clinic at Deansgate and the following is their report :—

"This year we have again to report a fall in the incidence of scalp ringworm. Whereas in the year 1929 one hundred and sixteen children received X-ray treatment here for ringworm of the scalp, only two cases received treatment during 1938, and one of these instances was imported from outside Manchester. Of these two, one has been discharged cured, whereas the second is still under treatment.

"The modus operandi has been early diagnosis, exclusion and treatment by X-ray. All contacts of school age in the home have been submitted to examination as far as possible. Again, instances of uncertain scalp disease have been examined here and a definite diagnosis arrived at by Wood's glass and microscope. During 1938 thirty-three children were submitted for diagnosis.

"In addition to ringworm of the scalp some cases of chronic skin disease were treated by X-ray — cases such as Verruca Psoriasis, etc. We received forty-two cases and discharged thirty-seven."

D. Oswald Taylor
L. W. Sparrow

(2) *Ringworm of the Body*

98 cases of ringworm other than the scalp were known during the year and all had received treatment or were under treatment at the end of the year. Of this number all except three cases were treated at the school clinics. It is pleasing to record that only two cases were discovered at routine medical inspection, thereby indicating that the work of supervision by the school nurses had been efficiently carried out.

Impetigo

The number of cases of impetigo known to the School Medical Officer last year was 4,014, as compared with more than 4,300 in the previous year. The incidence of the disease therefore shows a distinct fall. The percentage of these cases found at routine medical inspection was only 2.6. The remainder have been discovered by the school nurses on the occasion of their visits to schools or were sent to the school clinics by the parents or teachers.

The attacks of this disease are generally slight in character and there is little interference with the child's attendance at school, in fact, the disease which used to cause most interference with school attendance is now a very minor offender in that respect.

Other Skin Diseases

The number of cases of other skin diseases is approximately the same as last year. The number known was 5,727, and of this total 5,675 had received treatment during the year, 5,449 at the school clinics and 226 at other places than the Committee's institutions. These cases are generally of such a slight character that school attendance is not greatly interfered with.

The numbers of cases of all types of skin disease are responsible for almost 25 per cent. of the cases of minor ailment treated at the school clinics.

Miscellaneous Cases

This group of cases treated at the school clinics represents more than 50 per cent. of the cases of minor ailment, in fact, they actually represent 57 per cent. of the cases in attendance. Very many of them are of a particularly slight nature and could have been effectively treated at home. The position of the school medical service and these slight cases has been discussed in previous annual reports and there does not appear to be any means of reducing the attendance of this type of case and at the same time safeguarding the staff against attack by the parents of a case which might unfortunately develop a serious condition.

The number of cases of miscellaneous minor ailment under treatment last year was 25,329, and of this number 20,058 were treated at the school clinics.

(*d*) VISUAL DEFECTS AND EYE DISEASES

(1) *External Eye Disease*

The number of cases of external eye disease known to the School Medical Department during the past year closely approximates the number known in the previous year.

It is seldom that a severe case of eye disease is discovered and the cases generally only last a short time and school attendance is not greatly handicapped. In the control and treatment of this disease the value of repeated visits by the school nurses to the schools is clearly demonstrated. The cases are discovered early and as clinic treatment is always available the duration of the disease is generally short. Of the total number of cases of eye disease known, 97.3 per cent. receive their treatment at the school clinics.

(2) *Visual Defect and Squint*

In earlier annual reports the scheme for the oversight of all children suffering from visual defects has been outlined. Reference to Table IV, group II, shows that 10,384 cases of visual defect were seen at the school clinics during the past year. Most of the Assistant School Medical Officers undertake this branch of the service, and any special cases can be referred to Dr. H. V. White, the Committee's Consultant Ophthalmologist, who attends at the Central Clinic, Deansgate, on two sessions per week. Dr. White, in addition to seeing special cases, undertakes the treatment of cases of squint.

In general, the scheme provides for the yearly refraction of all cases of visual defect in children under eight years of age, all cases of myopia or squint and those of mixed astigmatism. The others are subject to a test and if the condition has remained stationary, are deferred for further twelve months, but if a refraction is indicated this is carried out. The number, 10,394, includes all new cases discovered during the year and of this total, glasses were prescribed in 4,347 instances. This is equal to a percentage of almost 42.

There still exists a very strong antipathy on the part of many parents to children wearing spectacles and this is reflected in the length of time taken to provide them in spite of the facts that they can be obtained at a low rate through the Education Committee's scheme and, where the income is low, that assistance can be obtained by application to the Education Committee. The School Medical Officer summons parents to the Central Offices when any type of case is not adequately treated within a reasonable period and the majority of these are cases of non-provision of suitable glasses.

Even when glasses have been obtained, the antipathy persists in not making the child wear them as required. To prevent this occurrence the Principal Teacher of the school, which the child attends, is notified immediately glasses have been prescribed, and is asked to notify the School Medical Officer if the glasses are not worn as directed. This, as a rule, is done either by letter or by mentioning the fact to the nurse on the occasion of her visits. In order to exercise a closer supervision, each district nurse will be supplied with particulars of every child who has had glasses provided so that she may make sure the child is wearing the spectacles as directed.

The evidence produced from many interviews with parents concerning non-provision of glasses shows that they do not understand why a child cannot see properly — especially so when the parents have not needed glasses themselves — "as his eyes look all right". This subject has a close analogy to dental treatment in so far that if there is no pain dental treatment is not required and if there is no outward manifestation in the eyes, glasses are not required. To those parents who are willing to learn and are willing to be convinced, the time spent on an explanation and sometimes a demonstration is amply repaid.

(*e*) NOSE AND THROAT DEFECTS

The treatment of nose and throat defects and aural defects is under the control of the Committee's Consultant, Mr. Brian P. Robinson, F.R.C.S. (Ed.), and a special report by him on certain phases of the work appears in the following pages.

In view of Mr. Robinson's report on diastolisation, a comparison of the figures of operative treatment during the past year with those of the present year is noteworthy. During the past year the total was 826 and in the year 1937 the total was 1,256. The number of operations under the authority's scheme was 547 in the year under report and 998 in the previous year. The difference in the two years was 451. The cause of the drop in the numbers of operations is mainly the increase in treatment by diastolisation.

The number who received other forms of treatment shows an increase of almost 1,000 cases. This increase is due to diastolisation and the introduction of treatment known, for want of a better name, as "nasal hygiene" in cases of catarrhal deafness discovered by the gramophone audiometer.

The classification under which the defect is recorded in those cases of deafness revealed by the audiometer is determined by the type of treatment the individual case requires. If treatment is given by the nose or throat, the case is classified as one of nose and throat defect; if the treatment is given to the ear, the case is classified as a case of ear disease.

(*f*) EAR DISEASE AND DEFECTIVE HEARING

In spite of the cases of ear disease which would have remained unnoticed but for the gramophone audiometer, the total number of cases of ear disease and defective hearing was approximately 400 less than in the previous year. Mr. Brian Robinson also comments on this fall in his report on treatment of ear disease.

The special treatment by zinc ionization has been continued by Dr. S. F. Reynolds at the Stretford Road and Gorton Clinics, and the following table shows the amount of work undertaken and the results of that work:—

Ear cases treated	47
No. of treatments given	69
Discharged as cured	21
Still under observation	26
Nasal cases treated	2
No. of treatments given	4
Discharged as cured	1
Still under observation	1

Of the 21 cases under observation from last year, 16 have been discharged as cured, and the remaining five are still under observation.

The following is the report of the Consultant Aurist, Mr. Brian P. Robinson, F.R.C.S.

During the past two and a half years a crusade against nasal catarrh has taken place in the Manchester School Medical Service. This has thrown a great deal of extra work on the Medical Officers and Nurses responsible for the treatment of Nose and Ear defects in the clinics. The writer wishes to acknowledge at the outset his indebtedness to all concerned for the willing co-operation without which the results achieved could never have been obtained.

The results of this work are now becoming evident in the decreased amount of otorrhoea seen in the clinics and in the fall in the number of children requiring operative treatment for tonsils and adenoids. These reductions have been very noticeable during the last twelve months.

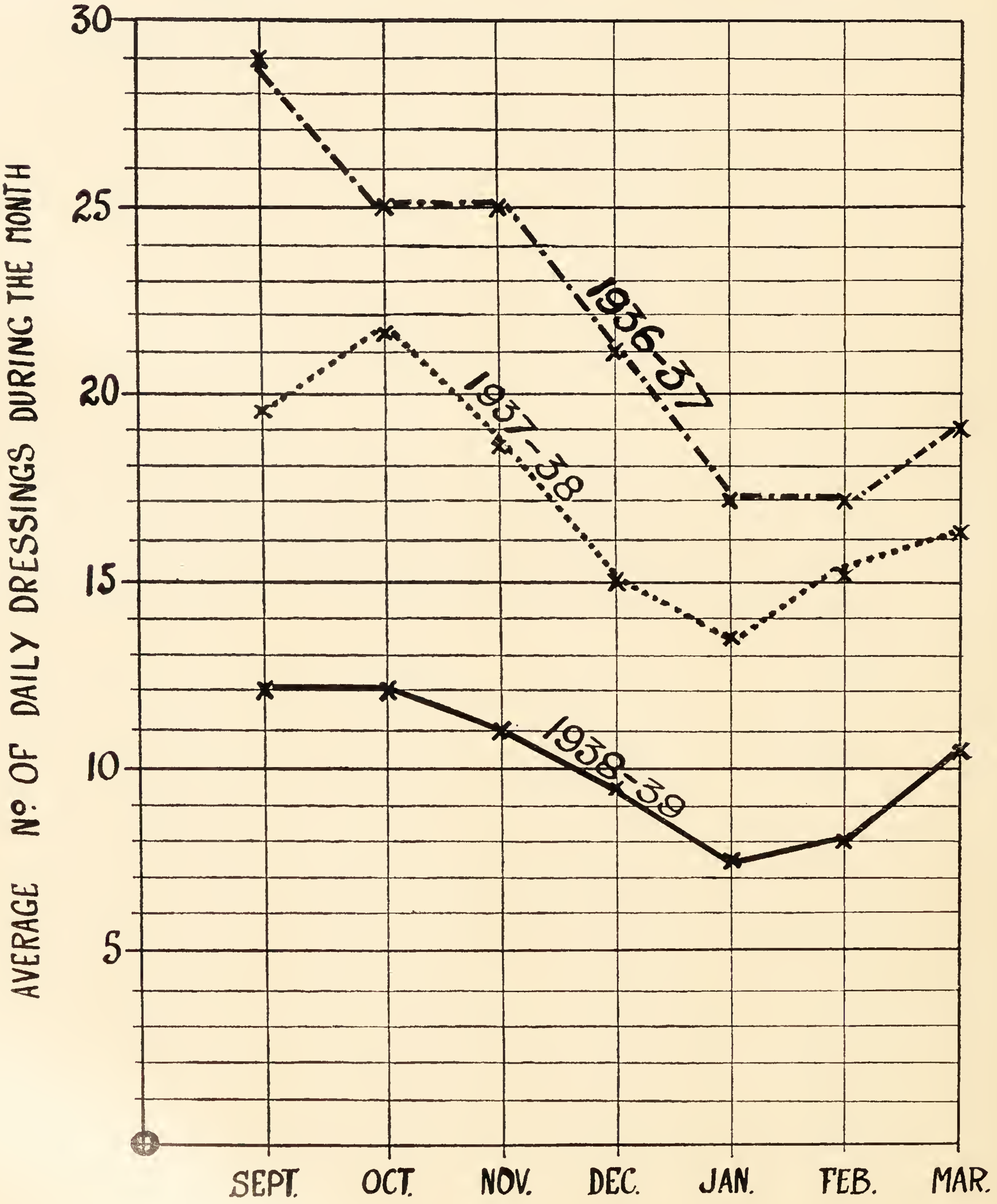
In order to demonstrate the decrease in chronic otorrhoea at the clinics, statistics have been obtained from one of the smaller clinics. This clinic was chosen because there has been no egress due to slum clearance schemes, or ingress due to the building of housing estates in the area served by this clinic during the past few years, so that the school population over the period under consideration has remained, for all practical purposes, at a constant level throughout. Moreover, it was one of the few clinics at which the figures required were available for the whole of the period, and it is a clinic in one of the better-class districts under the authority, where complicating factors such as overcrowding, bad home conditions and malnutrition were reduced to a minimum.

At the Manchester school clinics all children suffering from otorrhoea have to attend daily for ear dressings, until such time as the ear becomes dry. Thereafter they attend at weekly or longer intervals for observation, for a period not less than three months, before being discharged as cured. The number of daily dressings, therefore, is a perfectly accurate index of the number of children suffering from active otorrhoea and attending the clinic at any one time.

Table I consists of a graph showing the monthly average of daily dressings throughout the winter months of the last three winters.

TABLE I

GRAPH SHOWING AVERAGE Nº OF DAILY ATTENDANCES DURING THE WINTER MONTHS OF 1936-7-8.



The factors which influence the number of daily dressings are (1) the total incidence of otorrhoea, and (2) the period over which treatment has to be carried out before the ear becomes dry. Table II shows the incidence of otorrhoea over the period 1936-7-8, and Table III the average duration of treatment per case, which was found to be necessary before the ears became dry, over the same period.

TABLE II

SHOWING THE NUMBER OF CASES OF OTORRHŒA DURING 1936-7-8.

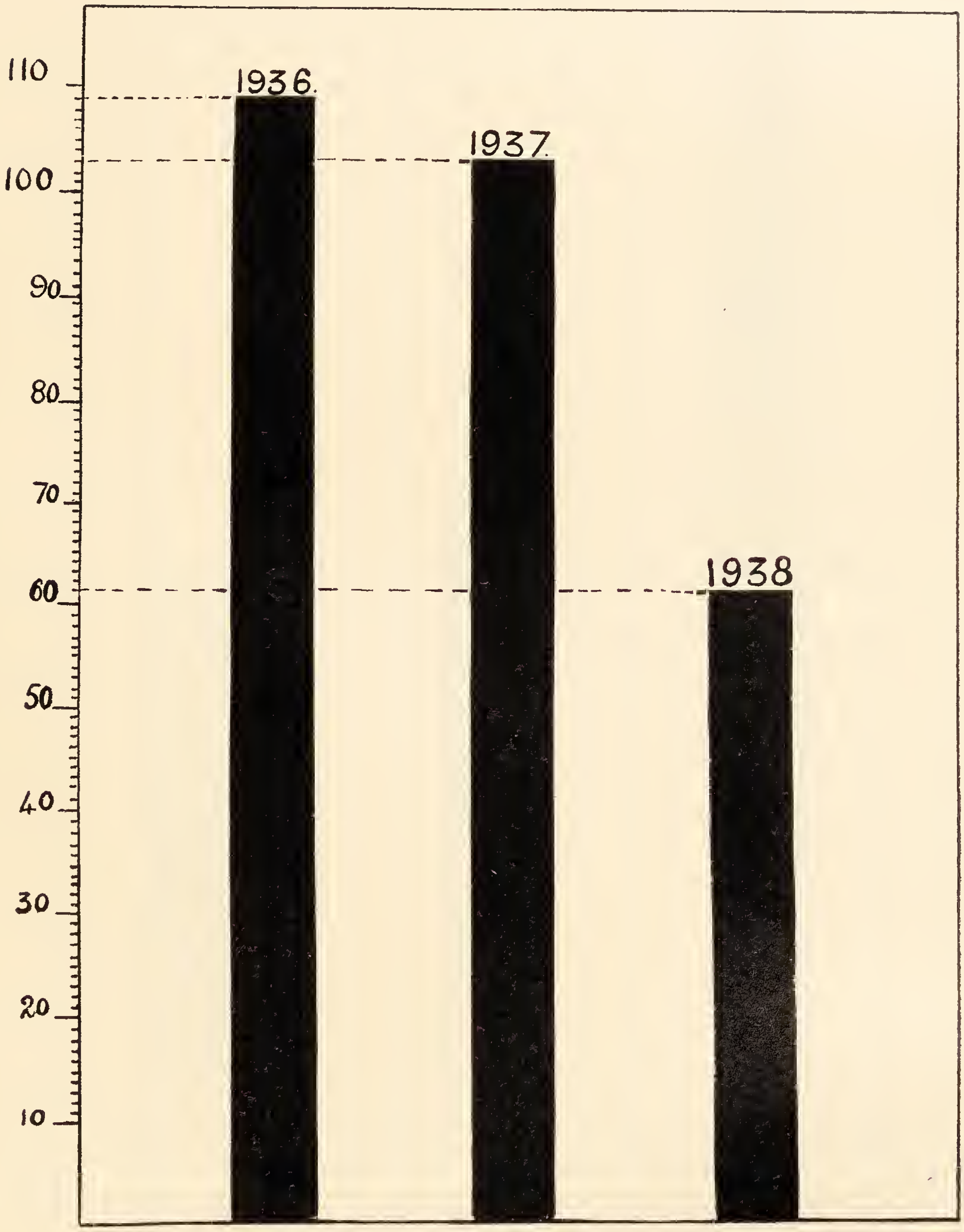
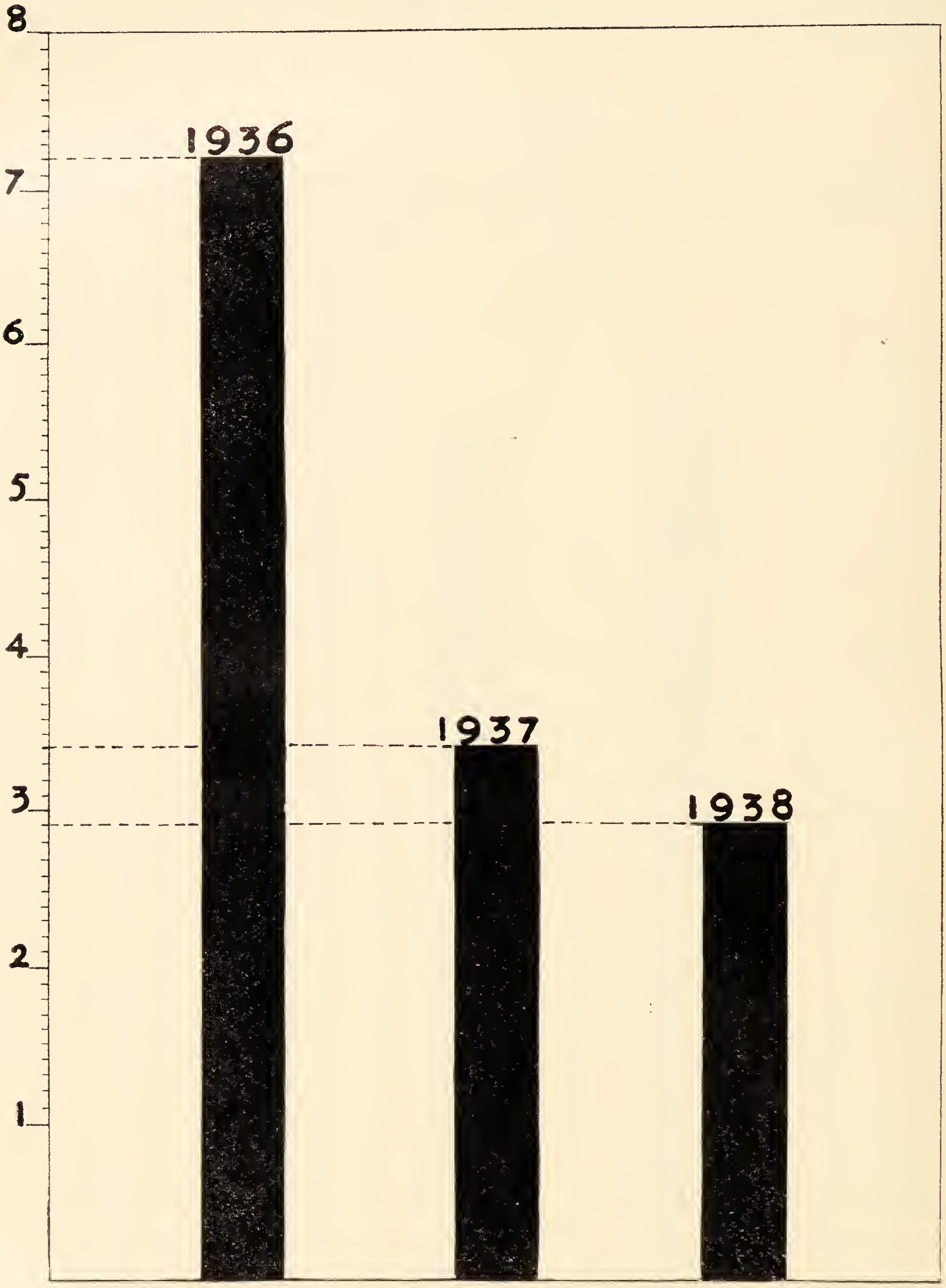


TABLE III

SHOWING THE AVERAGE ATTENDANCE IN WEEKS BEFORE EARS BECAME DRY



It will be seen from Tables II and III that the reason for the fall in the amount of otorrhoea in 1937 was the marked fall in the duration of treatment in that year. In 1938 it will be seen that there was a marked fall in incidence as well as a further fall in the duration of treatment.

Included in the incidence table are new cases, who have never had an attack of otorrhoea before, and cases in which the otorrhoea has recurred after a period of freedom which may have lasted from several months to several years.

Unfortunately, no figures are available showing what proportion of the cases, in the table of incidence, is due to recurrences, and what proportion is due to new cases. It has been observed, however, that the number of recurrences is becoming steadily smaller. Moreover, as it can hardly be expected that the measures taken in the treatment of catarrh will have any effect on the incidence of scarlet fever, measles, or even the common cold in the school population as a whole, any reduction in the incidence of otorrhoea is far more likely to be due to a fall in the number of recurrences than to any reduction in the number of new cases due to the causes mentioned.

The main factors favouring a recurrence of an otorrhoea are nasopharyngeal infection and the presence of a perforation in the ear drum. A perforation in the drum makes it possible for re-infection of the ear to occur via the external meatus, although in the writer's opinion this rarely occurs. It also favours re-infection from the nasopharynx. When a child with an intact drum blows his nose, coughs, sneezes or otherwise increases the air pressure in his nasopharynx, opening of the eustachian tube will cause an increase in the intratympanic pressure only, whereas if a perforation of the drum is present, any secretion which may be lying in the vicinity of the eustachian orifice will be blown into the tympanic cavity, and if infected will immediately cause a re-infection of the ear. The important role which nasal and nasopharyngeal infection plays in the production of recurrences is, therefore, quite obvious. It plays an equally important part in preventing a running ear from becoming dry, by continual re-infection via the eustachian tubes, and chronicity of otorrhoea is a very important factor in the production of large and permanent perforations of the drum, which also are important factors in the production of recurrences.

It is also interesting to observe the effect of treatment of nasal catarrh on the number of children requiring operative treatment for diseased tonsils and adenoids.

During the early part of 1936 there was a severe epidemic of measles so that no operations under the Committee's scheme for the treatment of tonsils and adenoids were performed during the first three months of that year. In the remaining nine months, 774 children were submitted to operation, which corresponds to an operation rate of 1,032 cases per year. In 1937, 978 children, and in 1938, 547 children, were subjected to operation for tonsils and/or adenoids.

This diminution in the number of children requiring operative treatment has been brought about by the treatment of nasal and dental sepsis. To-day, no child is submitted to operation until all dental sepsis has been eradicated, and an attempt has been made to treat the nasal catarrh, when present, by non-operative means. Under these conservative measures, many children whose tonsils and adenoids were definitely diseased have apparently made a complete recovery, so that there has been no necessity to subject them to operation. What part in this diminution is played by the treatment of the nasal sepsis and what part by the treatment of the dental sepsis, there are no statistics to prove, but it is the writer's opinion and it is an opinion shared by other Aurists, that nasal catarrh is far more often the cause than the result of diseased tonsils and adenoids. T. B. Layton in his lectures on the conservation of the lymphoid tissue of the Pharynx states that treatment of nasal catarrh will often relieve the necessity for operative treatment, and Leithhart, of Liverpool, has published some results on conservative treatment in infants. Below will be seen the writer's report on diastolisation.

The measures adopted in the Manchester School Medical Service for the treatment of catarrh are :—

(1) *Nasal Hygiene*

"This treatment is carried out at each clinic. The object of the treatment to clear the nose of discharge which tends to accumulate in case of chronic nasal infection, to teach the child to clear his nose effectively by blowing it, and induce him to breathe through his nose.

It is not a new treatment, but is merely an extension and adaption of the treatment of nasal catarrh by nasal douche and spray to suit school clinic requirements.

The child is first made to blow his nose, *a la paysanne*, if necessary, to clear away all excess of discharge from the nasal cavities. His nose is then gently irrigated with a lukewarm, alkaline saline lotion, and is again cleared. It is then sprayed with a weak menthol camphor and paraffin nasal spray, and finally he is made to do breathing exercises. The nurse carrying out the treatment insists that he produces a clean handkerchief or piece of rag each day, and gives him instructions how to use it.

This treatment is quite sufficient to cure many of the cases of nasal catarrh which attend the clinics, especially those in which the cause of the chronic infection is simply stagnation of the secretions of the nasal mucous membrane. The treatment is given daily until the nose is clear. The average duration of treatment necessary is from 3 to 6 weeks.

(2) In milder cases of nasal catarrh, where there does not appear to be much stagnation of the nasal secretions, the child is given a menthol camphor and vaseline nasal ointment and is instructed in the use of breathing exercises.

(3) *Diastolisation*

"There remains a large proportion of cases of nasal catarrh in which the condition is associated with mouth breathing. If the nasal obstruction is due to adenoids these are dealt with operatively. In many cases, however, the mouth breathing is due either to habit, or to hypertrophic changes in the nasal mucosa with enlargement of the turbinates. These cases are treated by diastolisation. In cases where there is some doubt whether the tonsils and adenoids are sufficiently diseased to warrant their removal, and in certain cases where operation is inadvisable or has been refused, diastolisation has been used.

Owing to difficulties in connection with apparatus, personnel and supervision, the Central Clinic only has been fitted up as a diastolisation clinic as yet, and all children treated by this method have had to attend this clinic throughout the duration of the treatment. Careful notes of cases attending for this treatment have been kept, and a special report is appended below giving the method used, the selection of cases, and a short analysis of the results so far obtained by this method of treatment.

CONCLUSIONS

From the above observations it would appear that nasal infections are responsible, both directly and indirectly, for a great amount of the Ear and Throat defects which form such a large proportion of the school clinic work to-day. Treatment directed against catarrh and other nasal infections may, therefore, be regarded as a prophylactic measure against the more serious and disabling conditions, such as deafness, otorrhoea and diseased tonsils and adenoids, which may arise as a result of nasal infection. The writer wishes to stress in this report the prophylactic aspect of the treatment of nasal catarrh for he believes that if nasal catarrh and colds were treated seriously in infants and children, much disability could be prevented and much ill-health avoided, both in the school child and the adult.

REPORT ON TREATMENT BY DIASTOLISATION

Diastolisation is a non-operative method of treating chronic catarrhal rhinitis, and the complications to which it may give rise, by massaging the interior of the nose with specially made bougies.

Diastolisation bougies are made of rubber and are hollow. They are about five inches long and their long axis is curved to conform with the curvature of the floor of the nose. They are roughly triangular in cross-section, the base of the triangle being on the lesser curvature of the bougie. The calibre of the bougie gradually diminishes from the open end to the tip which is closed. The bougies are made of soft rubber, so that although stiff enough to pass backwards through the nasal cavity without becoming doubled up or bent on themselves, yet they are pliable enough to bend and conform to the contour of the canal through which they are being passed. The rubber is also sufficiently thin to allow the bougie to be slightly distended when inflated with air. A pneumatic bulb completes the equipment, which may be attached to the open end of the bougie by means of rubber tubing and an adapter nozzle, so that pressure on the bulb will cause distention of the bougie and on relaxing the pressure the bougie will collapse.

The bougies are made in several sizes and are numbered, according to their calibre from I — V.

Method

The child is first made to clear his nose of all excess secretion by blowing it. The smallest size of bougie is then sterilized by dipping it for a minute in boiling water (prolonged boiling ruins the bougies). The bougie is then allowed to dry, the heat generated in the bougie by dipping it in the boiling water being quite sufficient to càuse it to dry rapidly. It is then lubricated by dipping the blind end in liquid paraffin, and passed backwards into the nasal passage until the tip comes to rest in the naso-pharynx. Gentleness is essential and force must not be used ; any resistance being overcome by steady gentle pressure. The procedure is quite painless though the presence of the bougie in the nose is uncomfortable.

The bougie is now allowed to remain *in situ* for about a minute. The pneumatic bulb is then attached and the mucosa is massaged by a partial withdrawal and re-insertion of the bougie, at the same time distending the bougie as it enters the nose and allowing it to collapse as it is partially withdrawn. This combined movement of the bougie is repeated 10 to 15 times before it is withdrawn.

The treatment is then repeated with the next larger size of bougie, until the largest bougie which the nose will comfortably take has been used. The child is finally given breathing exercises, which must be executed in and out through the nose.

The treatment is quite painless and causes no reaction afterwards. It is repeated twice a week for a period of six weeks.

History of Selection of Cases

Diastolisation is a method of treatment for chronic nasal obstruction and for the complications to which that chronic obstruction may give rise. Thus, it may be used in cases of catarrhal sinusitis and bronchitis, catarrhal deafness and those cases of chronic otorrhoea in which the cause of the chronicity is a persistent re-infection from the nasopharynx, as well as in cases of snoring and mouthbreathing due to chronic nasal insufficiency.

Professor Worms points out that it has its limitations, however, and that all cases of chronic nasal obstruction will not respond to this treatment. Osteocartilaginous deflections of the septum and hypertrophy of the bony framework of the turbinates can hardly be expected to respond to massage by soft rubber bougies. The most suitable cases for this treatment are cases of chronic hypertrophic rhinitis with swollen and congested turbinates, that is, those cases in which the classical treatment consists of cauterisation or partial removal of the turbinates. Diastolisation is the method of choice in these cases, as it produces results equally as good as the more classical methods of treatment without any destruction of nasal mucous membrane or the sensitive cavernous tissue which is so essential for the proper functioning of the nose. In adults and older children, some prefer the more radical classical methods of treatment, but in the young and in infants especially, the retention of the nasal mucosa is of the utmost importance, and even cauterisation of the turbinates is often inadmissible.

As well as being the ideal treatment for the obstruction caused by chronic hypertrophic rhinitis, diastolisation has the additional advantage that it stimulates the nerve endings in the nasal mucous membrane, and so reawakens its sensitivity, thereby contributing to the re-establishment of the naso-pulmonary and naso-diaphragmatic reflexes (Miller). This again is of the utmost importance in children.

Diastolisation is therefore the ideal treatment for chronic hypertrophic rhinitis in children. Gautier, the originator of the treatment, first practised it in treating nasal insufficiency in some girls from 8 to 12 years old who were resident at a holiday convalescent camp. Worms extended the treatment to children generally who were suffering from nasal obstruction and catarrhal conditions. Wisner reports the results of treatment in infants of a few months old by this method, and Wells and Miller have used it chiefly in the treatment of catarrhal deafness and otorrhoea. All report the most excellent results.

The figures which appear below are the results obtained in a series of 500 consecutive cases treated by diastolisation at the Central Clinic of the Manchester School Medical Service. More than half the children in this series were referred for inspection and an opinion as to the advisability of removal of the tonsils and adenoids, a few have been referred because of deafness or chronic otorrhoea, and a number of the cases have been referred because of recurrence of adenoids after operation for removal of the tonsils and adenoids.

Histories

In order to obtain detailed information as to the effects produced by diastolisation, careful clinical histories have been taken in all cases before and immediately after treatment was completed. Whenever possible an additional history has been taken six months later. In all cases the history has been checked by clinical observation as far as possible.

The following points have been particularly noted :—

(1) *Evidence of throat infections* — as shown by a history of repeated sore throats (twice or more in twelve months), of repeated attacks of swelling and tenderness of the cervical glands, and a history indicating toxic absorption, a history of growing-pains or general malaise accompanied by loss of appetite, pyrexia, pallor and debility.

(2) *Evidence of nasal obstruction* — as shown by a history of disturbed sleep, snoring or mouth-breathing at night, or a history of epistaxis indicating congestion of the mucosa.

(3) *Evidence of nasal infections* — as shown by a history of nasal or post-nasal catarrh, or a history of repeated colds (three or more per year).

(4) *Evidence of aural complications* — as shown by a history of deafness, earache or otorrhoea.

(5) *Evidence of chest complications* — as shown by a history of repeated attacks of bronchitis with colds, and occasionally a history of hoarseness and asthma.

On examination the condition of the tonsils was noted, the presence of adenoids, obstructing the nasal air-way, as shown by the absence of nasal resonance, any intra-nasal cause of obstruction and the presence of nasal catarrh.

Classification of Cases

Partly because the writer wishes to emphasise the value of diastolisation and other forms of treatment of nasal catarrh in the prevention of diseased tonsils and adenoids, and partly for the sake of clarity in the presentation of these results, cases have been divided into three groups according to the condition of their tonsils :—

Those in which the tonsils were healthy.
Those in which the tonsils were diseased.
Those in which the tonsils had been previously removed.

In the first group are included all cases in which the tonsils showed no evidence that they are, or had been, the subject of a septic infection. Many of the cases in this group had been referred for T. & A. operation, and in many cases the tonsils were enlarged and congested, probably from increased physiological activity, but no definite evidence of sepsis was to be seen.

The second group is comprised of those cases in which the tonsils showed definite evidence of sepsis, such as a grossly irregular and scarred surface, or the presence of what appeared to be septic crypts. Included in this group are those cases in which, although operation was considered advisable, there was some contra-indication, such as haemophilia or heart disease, those cases in which operation was advised but refused, and those cases in which, although the tonsils were diseased, it was decided to give a preliminary trial course of conservative treatment before advising operation.

In the third group are cases in which the tonsils and adenoids had been previously removed. Many of these cases suffered from marked chronic rhinitis and in not a few there had been a gross recurrence of the adenoids.

Classification of Results

In assessing the results of treatment both as regards the effects of treatment on the case generally and on the individual symptoms, four degrees of improvement are recognised as follows :—

C — cure — complete disappearance of symptoms.
MI — much improved — definite improvement but not complete disappearance.
Imp. — improved — slight or indefinite improvement.
Isq. — in statu quo — no improvement in the symptoms.

The same four degrees of improvement are also used in assessing the results observed clinically on examination.

Table I

DIASTOLISATION RESULTS

Cases with Non-Pathological Tonsils

	Immediate Results					Six-month Results				
	C.	MI.	Imp.	Isq.	Total	C.	MI.	Imp.	Isq.	Total
Sorethroats	52	3	—	4	59	29	3	1	4	37
Glands	45	2	3	3	53	23	2	1	3	29
Nasal Obstruction ..	108	69	22	11	210	99	22	6	9	136
Epistaxis	13	2	—	—	15	6	2	—	1	9
Catarrh	71	101	21	12	205	84	30	2	10	126
Colds	—	—	—	—	—	42	36	4	12	94
Deafness	41	39	19	16	115	41	13	5	6	65
Eareache	63	6	1	5	75	37	6	—	2	45
Otorrhoea	32	6	—	6	44	25	3	—	—	28
Bronchitis	37	17	12	8	74	38	7	4	2	51
Septic Absorption ..	29	13	10	9	61	21	9	1	8	39
Disturbed Sleep	46	11	7	5	69	40	1	—	4	45
No. of Cases	63	131	42	5	241	88	43	9	8	148

TABLE I — *continued.*

EFFECT ON PHYSICAL FINDINGS

	Immediate Results				Six-month Results			
ADENOIDS	C.	MI.	Isq.	Total	C.	MI.	Isq.	Total
Definitely Obstructive ..	7	25	1	33	16	5	2	23
Fair	52	22	2	76	38	3	8	49
Slight	20	8	1	29	18	—	3	21
NASAL OBSTRUCTION								
Narrow Nose	1	4	—	5	—	1	—	1
D.N.S.	1	8	—	9	1	3	1	5
Enlarged Turbinates ..	7	28	—	35	8	9	—	17

NASAL CATARRH	C.	MI.	Imp.	Isq.	Total	C.	MI.	Imp.	Isq.	Total
Nasal Catarrh	102	71	26	4	203	99	16	1	9	125

CASES WITH PATHOLOGICAL TONSILS—TABLE II

EFFECT ON SYMPTOMS

	Immediate Results					Six-month Results				
	C.	MI.	Imp.	Isq.	Total	C.	MI.	Imp.	Isq.	Total
Sorethroats	23	2	—	7	32	13	1	—	—	14
Glands	13	1	1	4	19	6	1	—	—	7
Nasal Obstruction ..	41	22	8	10	81	23	11	—	5	39
Epistaxis	7	1	—	1	9	3	—	—	—	3
Catarrh	31	31	6	10	78	23	13	—	4	40
Colds	—	—	—	—	—	13	9	1	3	26
Deafness	12	11	6	5	34	6	5	1	1	13
Earache	28	3	3	4	38	17	—	—	1	18
Otorrhoea	18	—	—	1	19	8	—	—	1	9
Bronchitis	21	6	—	5	32	9	4	—	2	15
Septic Absorption ..	12	4	5	10	31	7	3	—	2	12
Disturbed Sleep	12	3	2	6	23	7	—	—	3	10
No. of Cases	20	47	17	12	96	24	13	6	2	45

EFFECT ON PHYSICAL FINDINGS

	Immediate Results				Six-month Results			
ADENOIDS	C.	MI.	Isq.	Total	C.	MI.	Isq.	Total
Definitely Obstructive	8	13	—	21	6	3	3	12
Fair	25	14	—	39	15	1	2	18
Slight	4	1	—	5	2	—	—	2
NASAL OBSTRUCTION								
Narrow Nose	—	1	—	1	—	—	—	—
D.N.S.	1	1	—	2	1	—	—	1
Enlarged Turbinates ..	2	16	—	18	1	3	—	4

NASAL CATARRH	C.	MI.	Imp	Isq.	Total	C.	MI.	Imp.	Isq.	Total
Nasal Catarrh	38	24	—	23 +2	88	24	13	6	2	45

CASES WITH TONSILS REMOVED—TABLE III

EFFECT ON SYMPTOMS

	Immediate Results					Six-month Results				
	C.	MI.	Imp.	Isq.	Total	C.	MI.	Imp.	Isq.	Total
Sorethroats	21	4	2	3	30	13	2	—	2	17
Glands	20	4	4	2	30	13	3	—	1	17
Nasal Obstruction ..	48	49	19	11	127	48	17	2	17	84
Epistaxis	12	2	—	—	14	9	—	—	—	9
Catarrh	36	58	21	15	130	44	27	5	10	82
Colds	—	—	—	—	—	19	24	3	11	57
Deafness	15	36	15	6	72	21	15	—	6	42
Earache	38	5	2	4	49	25	3	1	2	31
Otorrhoea	24	6	4	4	38	13	2	—	5	20
Bronchitis	12	13	7	6	38	10	2	—	5	17
Septic Absorption ..	21	2	9	5	37	12	3	2	4	21
Disturbed Sleep	32	9	5	7	53	27	—	—	4	31
No. of Cases	27	84	24	10	145	40	29	14	7	90

TABLE III — *continued.*

EFFECT ON PHYSICAL FINDINGS

	Immediate Results				Six-month Results			
ADENOIDS	C.	MI.	Isq.	Total	C.	MI.	Isq.	Total
Definitely Obstructive . .	2	8	1	11	5	2	2	9
Fair	8	5	—	13	8	1	2	11
Slight	12	5	—	17	10	1	—	11
NASAL OBSTRUCTION								
Narrow Nose	1	2	—	3	—	—	2	2
D.N.S.	1	4	1	6	1	1	—	2
Enlarged Turbinates . .	2	21	4 +2	29	8	4	2	14

NASAL CATARRH	C.	MI.	Imp.	Isq.	Total	C.	MI.	Imp.	Isq.	Total
Nasal Catarrh	57	35	13	19	124	56	10	2	11	79

EFFECT OF THE PRESENCE OF ADENOIDS ON THE RESULTS

CASES WITH NON-PATHOLOGICAL TONSILS

ADENOIDS	Cured	Much Improved	Improved	I.S.Q.	Total
Definitely obstructive . .	13	7	4	1	25
Fair or slight	43	21	4	6	74
Absent	32	15	1	1	49
Total	88	43	9	8	148

CASES WITH PATHOLOGICAL TONSILS

ADENOIDS	Cured	Much Improved	Improved	I.S.Q.	Total
Definitely obstructive . .	5	5	1	2	13
Fair or slight	13	5	5	—	23
Absent	6	3	—	—	9
Total	24	13	6	2	45

CASES WITH THE TONSILS REMOVED

ADENOIDS	Cured	Much Improved	Improved	I.S.Q.	Total
Definitely obstructive . .	2	2	2	2	8
Fair or slight	10	9	5	—	24
Absent	28	18	7	5	58
Total	40	29	14	7	90

EFFECT OF ORGANIC NASAL OBSTRUCTION

	Cured	Much Improved	Improved	I.S.Q.	Total
Enlarged Turbinates . .	19	13	3	3	38
Deflected nasal septum . .	4	5	1	—	10
Narrow nose	1	1	—	2	4

Diastolisation Results

In the following analysis of the results of diastolisation, treatment has been considered successful if the symptoms and physical signs had completely disappeared or were much improved, and has been considered a failure if they were only slightly improved or not improved at all.

From an examination of the tables of results above, it will be seen that the results of diastolisation, on the whole, are very good. The immediate results show that of the 482 cases treated, the treatment was successful in 372, that is, in 77 per cent. The six-month results are even better, out of 283 cases treated, the treatment was successful in 237, or 84 per cent.

This might have been expected, for the relief of mouthbreathing will not cause an immediate cessation of the catarrh. It causes the catarrh to disappear gradually and with the catarrh the other conditions for which it was responsible.

From the analysis of cases according to the condition of their tonsils it will be seen that the treatment produces its best results in those cases in which the tonsils are present and show no evidence of septic infection. In this group — group (1) — the table of immediate results shows that the treatment was successful in 194 out of 241 cases, or 84 per cent., and the table of six-month results that the treatment was successful in 131 out of 148 cases, 90 per cent.

In group (2), in which the tonsils were pathological, definite improvement occurred in 67 of the 96 cases in the table of immediate results, that is in 69 per cent., which appears to be a surprisingly high percentage. In this group there are included 8 cases in which operation was advised on account of the presence of definite septic crypts in the tonsils, but in which operation was not performed. These cases were treated by diastolisation in the hope that surgical intervention might be avoided. In each case the treatment was unsuccessful. In an additional 4 cases, although no definite septic crypts were seen, the treatment also proved a complete failure. In 10 of these 12 failures, operation was advised at re-inspection immediately after treatment was completed, so that they do not appear in the table of six-month results. Of the 45 cases which do appear in this table, the treatment had proved successful in 37, that is in 82 per cent.

In the group of cases in which the tonsils had been removed, the immediate results were better than that group in which the tonsils were pathological but were worse than in that group of cases in which the tonsils were not diseased. In this group (3), the table of immediate results shows that treatment was attended by good results in 111 cases, or 77 per cent. of the 145 cases in the group. The table of six-month results shows that 69 of the 90 cases treated had shown definite improvement. That is again 77 per cent.

At first sight it might appear that the maximum benefit from this treatment is gained more rapidly in those whose tonsils have been removed, but this is not the case. It is due to the fact that although there is improvement in some cases during the six months after treatment is completed, this is balanced by a relapse in others. In this connection it is interesting to compare the immediate and the six-months results in those cases in which both are available, as they occur within the three groups. It was possible to make this comparison in 145 cases in the first group, 43 cases in the second group and 89 cases in the third group.

COMPARISON OF IMMEDIATE AND SIX-MONTH RESULTS

Number of cases in which the six-month results showed :

	Improvement	Stationary	Relapse	Total
Group I	72	54	19	145
Group II	19	18	6	43
Group III	32	35	22	89

From the above figures it appears that relapse is far more likely to occur in cases in which the tonsils have been removed, than in those in either of the other two groups. This increased liability to relapse has been found to be due to a decreased resistance to nasal infections in this group, and some of these children have been greatly benefited or even cured by artificial sunlight, adexolin and vaccines.

The relapses in the second group were mainly due to active septic conditions in the tonsils, 5 of the 6 cases in which relapse occurred being found to have evidence of active sepsis in their tonsils when examined six months after treatment was completed. In 2 cases the adenoids were definitely obstructive.

In the 19 cases in the first group in which relapse occurred, there were several cuases. The commonest cause appeared to be tonsil sepsis and adenoids, which occurred in 7 cases, in 5 following attacks of specific infectious disease. In one case the cause was an empyema of the antrum. Among the remaining cases the main cause was indifference on the part of the parent or laziness on the part of the child, not carrying out breathing exercises, and failing to use a handkerchief. In two cases there appeared to be an excessive liability to nasal infections.

It is interesting to note the effect of gross enlargement of the adenoids on the results of diastolisation. The table below shows the effect of adenoids on the six-month results. The cases are divided into those in which the adenoids were definitely obstructive, those in which the obstruction from adenoids was doubtful and those in which the adenoids were not causing any obstruction to the nasal air-way.

EFFECT OF ADENOIDS ON THE SIX-MONTH RESULTS

	Obstructive			Doubtful			Absent		
Group	Success	Failure	Total	Success	Failure	Total	Success	Failure	Total
Group I ..	20	5	25	64	10	74	47	2	49
Group II ..	10	3	13	18	5	23	9	—	9
Group III ..	4	4	8	19	5	24	46	12	58
	34	12	46	101	20	121	102	14	116

In estimating the degree of obstruction caused by adenoids, in this series of cases, the child's breathing and speech and the nasal resonance on saying "Normans" are observed. This is not a very accurate method of estimating the degree of obstruction due to adenoids and has latterly been given up in favour of digital examination of the post-nasal space, but it gives a fair idea of the degree of post-nasal obstruction present. It will be seen from the above table that the best results are obtained when the adenoids are least obstructive, and that the number of cases successfully treated by diastolisation varies inversely to the degree of obstruction caused by adenoids, but that the presence of definitely obstructive adenoids does not form a contra-indication to this form of treatment. Adenoid obstruction depends on the relation between the size of the mass of adenoids and the capacity of the naso-pharynx which has to accommodate it. The size of a mass of adenoids depends partly on chronic hyperplastic structural changes and partly on congestion, so that adenoids which may easily be obstructive when congested, may present no obstruction to the flow of air if that congestion is overcome. It is the writer's belief that it is in this class of adenoid obstruction that the results of diastolisation are good, and that in those cases in which the adenoid obstruction is due mainly to hyperplastic changes, the results are not so good.

Effect on Individual Symptoms

Time and space will not permit a detailed examination of the effect of diastolisation on the individual symptoms, but there are certain effects of this treatment which are especially worthy of note.

Amongst the most interesting of these effects is the effect on the incidence of sore throat and cervical adenitis. The tables of results six months after diastolisation was completed show that the incidence of each of these symptoms was reduced by 88 per cent. At first it was difficult to see why this should be so. It is due in the writer's opinion at any rate, to the effects of this treatment on mouthbreathing and catarrh.

During normal nasal respiration the air in its passage through the nose is filtered of dust and organisms, is warmed, and its humidity is increased, almost to saturation point. Mouthbreathing robs the inspired air of this humidifying and cleansing action of the nasal mucosa. The dry air striking the pharyngeal epithelium, dries it and in all probability by so doing reduces its vitality, making it less able to withstand infection from the pathogenic organisms in the inspired air. The passage of infected mucus from the nose down the back of the throat forms an additional source of infection from which attacks of acute inflammation may arise. Other writers have reported cures of "tonsils and adenoids" from removal of a septic focus in the nose or mouth, so why should not the beneficial effects of diastolisation be produced in much the same way?

Also worthy of note is the effect of diastolisation on attacks of the common cold. The diminution which occurs both in the frequency and severity of colds after diastolisation is shown in the three tables of six-month results. This diminution is most marked in those cases in which the tonsils are intact, the liability to colds being reduced in 83-84 per cent. In those cases in which the tonsils have been previously removed, the liability to colds is reduced in 77 per cent. only. This is due apparently to the increased liability or lack of resistance which sometimes occurs in those whose tonsils have been removed, particularly if the operation was done in infancy. The good results are due to the re-establishment of nasal respiration.

The key to the good results of diastolisation in the treatment of nasal catarrh with its aural and bronchial complications, as well as the effects on sore throats, cervical adenitis, and colds, is to be found in the effect it produces on nasal obstruction, or as the writer prefers to call it, nasal insufficiency, the symptoms of which are snoring and mouthbreathing.

Nasal sufficiency is dependent on the relation of two factors, the powers of the muscles of respiration, particularly the diaphragm, and the resistance afforded to the passage of air through the nose.

In his original article on diastolisation, Gautier records some observations obtained by Genevoix on his patients at the Vanderbilt Hospital in Paris.

The movements of the diaphragm were observed radiologically during respiration. In mouthbreathers it was observed that these were reduced, the total excursion of the cupola of the diaphragm being rarely more than 1-2 cms., as against a normal excursion of over 3 cms. It was also observed that the costo-phrenic and cardio-diaphragmatic angles remained wide throughout respiration. On taking a deep inspiration, the expansion of the thoracic cavity was brought about mainly by contraction of the muscles of the chest wall and not by the diaphragm. When nasal respiration was re-established, however, by diastolisation, the normal movements of the diaphragm were regained.

It was found that in these cases of nasal insufficiency the measurement of the maximum respiratory delivery by the Pech "Masque Manometrique" was also reduced. Diastolisation also increased this measurement.

As the masque manometrique is a measurement of the rate at which air can be drawn into the lungs through nose and mouth, it is a measure of the power of the respiratory muscles rather than the resistance afforded by the nose to the passage of air through it.

In the present series the tables of six-month results show that snoring and mouth-breathing were treated successfully in 85 per cent. of cases. But to what extent this is due to increase in power of the respiratory muscles, or to decrease of the resistance afforded by the nose, there are no figures to show.

Lastly, the effect of diastolisation on the occurrence of attacks of epistaxis shows that this form of treatment reduces the congestion of the nasal mucosa, which fact is born out by clinical observation.

Conclusions

The results of diastolisation are good, sometimes they are dramatic, but we have, as yet, no definite information how they are produced. All investigators are agreed, however, that the good results of diastolisation are in no way due to mechanical dilation of the nasal cavities by the bougies.

As far as is known diastolisation has three direct results :—

(1) It causes an increased secretion of mucus and emptying of the mucous glands of the nose.

(2) It decreases the turgescence of the cavernous tissue and reduces capillary stasis, thereby decreasing congestion of the nasal mucosa, and improving the circulation within the nose generally. (Worms.)

(3) It increases the maximum respiratory delivery as shown by the Pech "Masque Manometrique" (Miller and Wisner). But whether this is due to an increased efficiency of the respiratory muscles, to a decreased resistance to the flow of air through the nose, or to a combination of both factors is not definitely known.

Miller suggests (1) that the benefit gained from diastolisation is entirely due to the action of the bougies, by simple contact, on the rich network of nerves lying in the nasal mucosa. (2) That the sympathetic and other nerve endings in the mucous membrane of the nose and its connections with the sphenopalatine ganglion, regulate the vasomotor and secretary functions of the mucous membrane of the nose, sinuses, and in all probability the middle ear cleft. (3) That there is a dilation of the nasal cavity and that this is due to active retraction of the mucous membrane and the underlying soft parts. (4) That in prolonged mouthbreathing the nasal mucosa becomes inert and less sensitive to the stimulus of air striking it, so that the reflex stimulation of the diaphragm and lungs becomes impaired. Diastolisation re-establishes the sensitivity of the nasal mucosa, and so increases the activity of the naso-pulmonary and naso-diaphragmatic reflex.

That diastolisation is of value in the treatment of chronic hypertrophic rhinitis, and the complications to which it may give rise, there can be little doubt to anyone who has given the treatment a fair trial.

Gautier and Worms describe the use of diastolisation in nasal insufficiency and catarrhal rhinitis in children. Wells and Miller stress its value in treating deafness discovered by the routine use of the gramophone audiometer. Wisner describes the treatment of infants a few months old by this method, and Massini describes good results in the treatment of trigeminal neuralgia and spasmodic conditions of nervous origin.

The analysis of the results of diastolisation according to the condition of the tonsils and according to the degree of obstruction from the presence of adenoids, throws valuable light on diastolisation as an alternative to operation in the treatment of children with chronic tonsillitis and adenoids.

From the above analysis it will be seen that when the tonsils are the seat of active sepsis, as shown by the presence of septic crypts, diastolisation will prove practically useless. But in those cases in which the tonsils, although scarred and chronically inflamed as the result of previous attacks of acute tonsillitis, yet show no evidence of septic crypts, the child may be treated quite successfully by diastolisation.

The presence of definitely obstructive adenoids forms no contra-indication to this form of treatment as in many instances the obstruction is due to congestion rather than hyperplasia of the adenoid tissue. In about 14 per cent. of cases, however, hyperplastic enlargement of the adenoid mass will prove a cause of failure.

The writer's object in this report has been to show that it may be used as an alternative to operation in some cases of diseased tonsils and adenoids, and that along with other forms of treatment for nasal catarrh it has been responsible for a large fall in the amount of chronic otorrhoea in the schools of the City of Manchester.

BRIAN ROBINSON, F.R.C.S. (Ed.).

(*g*) DENTAL DEFECTS

During 1938, the Dental Surgeons inspected 50,441 children. Of these, 35,193 children — 69.7 per cent. — were found to require dental treatment. This represents a drop of nearly 4 per cent. in the number requiring treatment, as compared with 1937. Of those requiring treatment, 20,921 accepted it — a percentage of 59.4, an increase of 6 per cent. in acceptances over the 1937 figure. In addition, 12,404 "special" or "casual" cases were treated.

The treatment of the "casual" case is one of the most unsatisfactory features of dental work. Were there a full complement of dentists to enable us to give the benefit of dental inspection and the offer of full treatment to every child in the city, "casuals" would diminish to a negligible quantity. "Casual treatment," which means, as a rule, only the extraction of one or more aching teeth (because they are aching), is only a placebo and neglects the real object of the school dental service, which is the complete hygiene of the mouth. The time devoted to it is time taken from the school dentist's proper work. It is lamentable that one-third of the cases treated in Manchester are "casual" cases, cases, that is to say, in which the treatment achieves no real purpose.

There is only one solution to this problem and that is the appointment of such a number of dentists as will enable every child in the city's schools to be examined once yearly — as an immediate ideal — and once in six months as a more remote ideal.

It does seem, however, in the meantime, a matter for serious consideration in 1939, whether the time now allotted by the school dentists to "casual" work should not be reduced. That may mean that many children with aching teeth will require to go to the Dental Hospital, but on the other hand it will ensure that a very considerable number of other children can leave school, not merely with aching teeth removed, but with healthy, hygienic mouths — an infinitely more important matter. It is no exaggeration to say that from the public dental service standpoint, the money spent on "casual" work is wasted.

Much has been said in previous reports of the necessity for propaganda on the subject of teeth. The belief that it is only when a tooth aches that anything should be done dies hard. Some of the elementary ideas of preventive medicine — the need for fresh air, adequate sleep, good food — have permeated the public mind : but of the value of preventive dentistry there is still little or no appreciation.

The Education Committee during 1938 took the important step of appointing a Senior Dental Officer who will be responsible for the administration of the whole of the dental work, subject to the control of the School Medical Officer, and who will also, as part of his duties, carry out ordinary dental duties in a clinic. Mr. A. G. Batten, the successful candidate, commenced his duties immediately after Christmas, 1938.

(*b*) ORTHOPAEDIC AND POSTURAL DEFECTS

Mr. E. D. Telford, F.R.C.S., reports on the work carried out at the Orthopaedic Clinic in the Lancasterian School building during 1938. The cases referred to do not include those attending the Lancasterian School, but some were recommended for admission.

"The number of new cases seen by me at this Clinic during 1938 was 240.

"These are classified as follows :—

Rickets	50
Deformities of feet	56
Scoliosis	32
Anterior Poliomyelitis	18
Spastic Paralysis	5
Hallux valgus	14
Hammer toe	10
Torticollis	11
Traumatic lesions	14
Various other deformities	30
	240

"In addition to these the number of attendances of other cases brought up for supervision and after-care was 1,061.

"The figures of attendances and treatments given at the Treatment Clinic during 1938 are :—

Total attendances	5,338
Number of individual treatments :—	
Sunlight	5,172
Massage	5,109
Remedial exercises	3,977
Fitting corrective appliances	53
	14,311

"The Treatment Clinic has again had a year of hard work and continues to give excellent results, especially in cases of postural deformity.

"During the year Miss H. Heywood has retired from the Massage Staff and I should like to take this opportunity to express our indebtedness to her for her most efficient and devoted services during many years."

In a later section of the Report, that relating to the Residential Cripple School, reference is made to the marked diminution in the number and severity of cases of Rickets. This shows itself also in the Clinic work. In 1929 — the second year of the Clinic's work, 136 out of 261 new cases were rachitic : last year 50 out of 240.

The total number of new cases seen by Mr. Telford diminished from 309 in 1937 to 240 in 1938, but the figures of attendances and treatment for 1938 vary by very small amounts from those of 1937.

Remedial Exercises

Remedial exercises for minor orthopaedic and postural defects are demonstrated at six of the school clinics and the treatment is under the supervision of Dr. G. W. Matthews.

During the past year 265 cases of spinal curvature and 478 cases of flat feet occurring amongst children in the elementary schools have been examined by Dr. Matthews and treatment prescribed. Of this number, 141 cases of spinal curvature and 268 cases of flat feet have been discharged as cured. In 67 instances the children either left the district or the parents refused to continue the treatment. In 267 instances the treatment was incomplete at the end of 1938 and will be continued in the following year.

In connection with the treatment, Dr. Matthews has undertaken 2,224 examinations or re-inspections and the attendances at the clinics number 7,709. In addition, 86 visits were paid to schools where children could not attend the school clinics and demonstrations of the exercises given in 207 instances. Massage was given in 76 cases as a supplement to the exercises.

Similar facilities are also extended to the students at the Secondary and Day Continuation Schools.

From these schools, 27 cases of spinal curvature attended and 81 cases of flat feet. During the year, 56 cases were discharged as cured and 690 attendances were made at the school clinics.

(*i*) HEART DISEASE AND RHEUMATISM

Considerable detail was given in last year's Report of the work of the supervision clinic in so far as it relates to children in this group, and also some facts regarding the condition of the children. Careful supervision continues to be exercised over all cases of this type known to us, our main endeavour being to secure that parents secure regular treatment for such of the children as require it. Slighter cases able to attend school with only infrequent absences are seen at re-inspections in school.

Dr. W. R. Honeyburne has made an enquiry into the incidence of rheumatism in relation to pigmentation. This report follows here :—

"*The Incidence of Rheumatism in relation to Pigmentation of Hair and Eyes*

"In this investigation the colour of the hair and eyes of 400 Manchester children attending the Central Clinic for rheumatism was compared with that of an equal number of children seen at routine inspection during the same term. The latter belonged to the intermediate and leaver groups, 100 boys and 100 girls being taken, unselected, from each group.

"The average age was the same for the rheumatic and the non-rheumatic, being between 10½ and 11 years. Entrants and aliens were not included.

"*Table A*

"Showing the percentage distribution of types of hair colour in rheumatic and non-rheumatic children :—

	Fair	Red	Medium	Dark
Rheumatic children ..	15.8	6.5	42.5	35.2
Non-rheumatic children ..	24.3	5.2	39.5	31.0

"*Table B*

"Showing the percentage distribution of types of eye colour in rheumatic and non-rheumatic children :—

	Blue	Light	Medium	Dark
Rheumatic children ..	18.5	31.0	35.0	15.5
Non-rheumatic children ..	19.5	34.0	28.2	18.3

"No significant sex difference was found for either hair or eye colour.

"There has been some selection by rheumatism of the medium and dark-haired in preference to the fair-haired.

"For eye colour, the difference between the rheumatic and the non-rheumatic child is much less significant.

"The medium, i.e., mixed, shades are the least desirable as regards resistance to infection.

"In an investigation of this nature the personal equation must, unfortunately, affect the grouping.

"1. Tocher, who made a very thorough pigmentation survey of school children in Scotland, found the following percentages for Scottish boys :—

Hair			
Fair	Red	Medium	Dark
24.9	5.5	43.3	26.3

"2. Beddoe had found for English boys :—

HAIR			
Fair	Red	Medium	Dark
33.5	4.1	34.0	28.4

The Manchester figures are given by me — from Table A — for the purpose of comparison :—

HAIR			
Fair	Red	Medium	Dark
24.3	5.2	39.5	31.0

Similar percentages for eye colour were for Scottish boys :—

EYES			
Blue	Light	Medium	Dark
14.7	30.3	32.7	22.3

for English boys :—

EYES			
Blue	Light	Medium	Dark
—	41.4	37.0	21.6

for Manchester children from Table A :—

EYES			
Blue	Light	Medium	Dark
19.5	34.0	28.2	18.3

Tocher used a 5m. group for hair-colour "Jet-black" (in this paper included in "Dark"). This shade he found to be especially common among Gaelic-speaking people in Scotland. No case was seen by me among the 800 Manchester children.

"3. Fisher, from an analysis of Tocher's figures for one district of Scotland, found a significant sex difference for hair-colour, but this was entirely due to the inclusion of the "Jet-black" group. Only a small number of cases were found, but this colour was twice as common among the boys as it was among the girls.

"4. Similar investigations have also been made at London and Glasgow as regards pigmentation and rheumatism.

"The percentages for St. Thomas' Hospital are similar to those for Manchester with respect to hair-colour, but the Royal Hospital for Sick Children, Glasgow, found the differences not great enough to be significant.

"For eye-colour, however, the results for the Glasgow Hospital do support the Manchester findings. The figures for Great Ormond Street Hospital are not comparable, as rheumatic and non-rheumatic children from the same families were alone considered, and fraternal association affects the result.

"In view of the supposed streptococcal origin of both rheumatism and scarlet-fever, it might be expected that a similar pigment selection would be found for both these diseases.

"This does not seem to be the case, for

"5. Carr-Saunders found no significant difference for scarlet-fever and other infectious diseases among Birmingham children, and

"6. Macdonald, in a study of children at Glasgow Isolation Hospitals, found that it was the dark-haired child that had the greater recuperative power in these diseases, and the same for the dark-eyed.

"7. Shrubsall, from a study of cases at St. Bartholomew's Hospital, considered fair hair to be associated with rheumatism, heart disease and tonsillitis.

"8. Finally, Pearson found dark hair to be positively correlated with health in children, but not to a marked extent (r = +.19), while eye-colour was of very slight importance.

"Although the Manchester figures seem to point to some selection in rheumatism of the dark haired rather than the fair for attack, the results of other observers are certainly not uniform in their agreement, and further investigation is most desirable.

"The word 'significant' used here implies that the differences in the class frequencies between the observed and the expected would not arise from random sampling.

"Fisher's probability tables were used for the statistical analysis."

1. Tocher — "Pigmentation Survey of Schoolchildren in Scotland" — Biometrika, Vol. 6.
2. Beddoe — "Races of Britain".
3. Fisher — "Statistical Methods for Research Workers".
4. Special Report Series of the Medical Research Council, No. 114.
5. Carr-Saunders — "Pigmentation in relation to Selection", Biometrika, Vol. 8.
6. Macdonald — "Pigmentation of the Hair and Eyes of Children suffering from the acute fevers" — Biometrika, Vol. 8.
7. Shrubsall — "St. Bartholomew's Hospital Report". Vol. 39.
8. Reference by Carr-Saunders (5).

(*j*) TUBERCULOSIS

The Chief Tuberculosis Officer for the city is responsible for the treatment of all cases of tubercular disease and the following figures show the number and type of cases of tubercular disease known to exist amongst children of school age :—

Pulmonary Tuberculosis	121
Non-Pulmonary Tuberculosis	259

The School Medical Officer notifies the Tuberculosis Officer of every suspected case of tubercular disease and likewise the Chief Tuberculosis Officer notifies the School Medical Officer of every case of tubercular disease notified to him by private practitioners and the hospitals of the city.

Mr. E. D. Telford, F.R.C.S., who is the Consultant Orthopaedic Surgeon to the Education Committee, acts in a similar capacity for the Public Health Department in connection with the Abergele Sanatorium. The transference of cases of quiescent non-pulmonary tuberculosis from Abergele Sanatorium to the Committee's Residential or Day School for Cripples is therefore accelerated and has the additional advantage of continuous supervision by the same surgeon. This is a further instance of the co-ordination of Public Health activities.

FOLLOWING UP

(*a*) BY NURSES

All cases of disease or defect requiring treatment and obtaining that treatment at places apart from the Committee's Institutions are followed up by the school nurses, who report whether treatment has been obtained and whether the parents are carrying out the instructions given and all reports are submitted to the Superintendent Nurse, who examines the report and gives instructions as to further action and report. All cases which have received treatment and are able to attend school are submitted to the Medical Officer on the occasion of his visits for the purpose of routine inspection or for the purpose of re-inspection. Only those cases of minor ailment are removed from the nurses' lists as cured without an opinion from a Medical Officer. In the remainder of the cases the opinion of the Medical Officer is sought before the report sheet is taken from the nurses' lists as satisfactory.

A table of defects is given on the page following the supervision of cases by Medical Officers at School Clinics and it will be observed that during the past year the school nurses have followed up 3,492 defects and the number of home visits paid was 9,976, although some of these visits may have been in connection with cases of uncleanliness or non-attendance at a school clinic during treatment of a minor ailment.

(*b*) BY MEDICAL SUPERVISION

The table referred to under the preceding heading shows that 3,730 defects were under the supervision of the school medical staff during the past year at the Central Clinic at Deansgate.

The school clinics generally have been fully occupied in the treatment of children and little or no time has been available for the supervision of children suffering from more serious conditions. Further, the work of medical supervision is closely allied with that of the residential schools, and as the whole of the administration connected with the residential schools is undertaken at the Education Offices, the attendance of parents and children at these offices allows of a more expeditious method of dealing with children found suitable for one of the residential schools or even the day open-air school. The periodical supervision of these ailing children enables the Committee's medical staff to be assured that regular treatment is being provided and the child's special requirement concerning its attendance at school and even its curriculum modified.

TABLE OF DEFECTS "FOLLOWED UP"

Defect or Disease (1)	By School Nurses	Supervised by Medical Officers at Supervision Clinic	Totals
Skin —			
(1) Ringworm — Scalp	—	2	2
(2) Ringworm — Body	3	—	3
(3) Scabies	19	—	19
(4) Impetigo	56	—	56
(5) Other Diseases (Non-Tuberculous) ..	226	—	226
TOTAL (Heads 1 to 5)	304	2	306

Eye —			
(6) Blepharitis	37	—	37
(7) Conjunctivitis	31	—	31
(8) Keratitis	3	—	3
(9) Corneal Opacities	5	—	5
(10) Other conditions (excluding Defective Vision and Squint)	37	—	37
TOTAL (Heads 6 to 10)	113	—	113
(11) Defective Vision (excluding Squint)	193	—	193
(12) Squint	90	—	90
Ear —			
(13) Defective Hearing	15	—	15
(14) Otitis Media	110	—	110
(15) Other Ear Diseases	32	—	32
Nose and Throat —			
(16) Chronic Tonsillitis only	150	—	150
(17) Adenoids only	32	—	32
(18) Chronic Tonsillitis and Adenoids	223	—	223
(19) Other conditions	146	—	146
(20) Enlarged Cervical Glands (Non-Tuberculous)	33	—	33
(21) Defective Speech	40	2	42
Heart and Circulation —			
(22) Heart Disease — Organic	23	381	404
(23) ,, Functional	21	34	55
(24) ,, Anaemia	177	302	479
Lungs —			
(25) Bronchitis	345	319	664
(26) Other Non-Tuberculous Diseases	94	220	314
Tuberculosis —			
(27) Pulmonary: Definite	—	—	—
(28) ,, Suspected	—	51	51
(29) Non-Pulmonary: Glands	—	—	—
(30) ,, Bones and Joints	—	—	—
(31) ,, Skin	—	—	—
(32) ,, Other Forms	—	—	—
TOTAL (Heads 29 to 32)	—	—	—
Nervous System —			
(33) Epilepsy	—	124	124
(34) Chorea	36	248	284
(35) Other Conditions	59	130	189
Deformities —			
(36) Rickets	21	—	21
(37) Spinal Curvature	6	—	6
(38) Other Forms	49	—	49
(39) Other Defects and Diseases (excluding Uncleanliness and Dental)	763	1,915	2,678
TOTAL	3,492	3,730	7,222

(*c*) BY OTHER MEASURES

In all instances of persistent non-attention to treatment, the parents are urged by methods stronger than a warning by a printed card. The first step is to summon the parents to attend at the Education Office, to give to the School Medical Officer their reasons for not providing the treatment required. When this procedure fails, the cases are referred to the Bye-Laws Department to summon the parents to appear before the Rota, or to submit for prosecution. The Rotas are Committees held in the evenings in various parts of the City, where parents are summoned to attend to give reasons for their child's irregular attendance at school, and where no valid reasons for absence have been supplied. As visits to the Rotas may be the forerunner of prosecution in the event of non-compliance with the Committee's legal requirements, neglectful parents are usually sufficiently impressed to give matters of medical treatment their immediate attention.

The following tables show the disease or defect which has not received attention, and the numbers occurring under the different headings throughout the year.

SUMMONED TO ATTEND BEFORE THE SCHOOL MEDICAL OFFICER, 1938

Defective Vision	221
Squint	36
Blepharitis	7
Scabies	6
Eczema	1
Dermatitis	2
Otorrhoea	8
Other Ear Disease	6
Chronic Tonsilitis and Adenoids	2
Epilepsy	1
Knock Knee	7
Flat Feet	18
Round Shoulders	6
Scoliosis	7
Rickets	8
Genu Valgum	1
Ruptured Plexus	1
Fracture	1
Deformity of Toes	1
Paralysis	1
Abscess	1
Uncleanliness	1
TOTAL	343

ROTAS

Failure to comply with Education Act, 1921, Sec. 55 (5)	5
Defective Vision	5
Rickets	1
Round Shoulders and Flat Feet	1

PROSECUTIONS

Failure to comply with Education Act, 1921, Sec. 55 (5)	1—Adjourned by Court for examination.
Defective Vision	2—Withdrawn. Glasses obtained after visit by Officer, Bye-Laws Department.
Persistent uncleanliness after compulsory cleansing	3—Fined 5s. each.

ULTRA-VIOLET RAY TREATMENT

This type of treatment has been carried out during the year at Ancoats and Stretford Road Clinics. This treatment is also given to certain of the children attending the Day Open Air School and the Orthopaedic Clinic, as also some children in the Residential School for Crippled Children.

The table below summarizes the treatments given during the year, under the names of the various conditions dealt with.

	Under Treatment		Discharged	
	Improving	*Stationary*	*Improved*	*Stationary*
Bronchitis and Catarrh	42	14	67	13
Anaemia and Debility	61	14	129	23
Rickets	5	5	16	7
Asthma	12	1	1	1
Rheumatism	3	—	13	3
Chorea	3	—	2	1
Enlarged glands	2	1	4	1
Unresolved pneumonia	—	1	3	1
Sub-normal nutrition	19	1	39	2
Alopecia	1	—	4	—
Blepharitis and Conjunctivitis	4	—	3	2
Otorrhoea	1	4	2	—
Seborrhoea	—	1	1	—
Scoliosis	1	—	—	—
Malaise	—	2	—	—
Enuresis	—	—	1	—
Mitral-systolic murmur	—	—	—	1
Hemiplegia	—	—	1	—
Insomnia	—	—	2	—

No. of children treated during 1938	541
No. of children discharged during 1938	343
No. of treatments given during 1938	11,272

Dr. Bridgeford contributes the following notes with reference to treatments given at Stretford Road Clinic :—

"The average number of treatments per case at Stretford Road Clinic was 30.2. General exposures to Mercury Vapour lamps were given at twice weekly intervals, and most of the children received a three-months' course, but certain cases, particularly those of asthma, were found to require radiation for much longer periods.

"Of the cases selected for treatment at this Clinic, the following are the main groups :—

"(1) *Nutritional disorders*, comprising

(*a*) Weakly children who do not thrive, but who are not apparently suffering from any definite disease.

(*b*) "Nervous" children who fail to gain weight, have disturbed sleep, irritability and capricious appetites.

(*c*) Convalescents after acute illnesses or operations.

(*d*) Children suffering from acidosis.

"(2) *Respiratory Affections*

(*a*) Children suffering from catarrhal colds and coughs.
(*b*) Cases of bronchitis and asthma.

"(3) *Anaemia*

"(4) *Rickets*

"(5) *Rheumatism and Rheumatic Diathesis*

"(6) *Local Conditions*

i.e., enlarged glands, otorrhoea, skin diseases. etc.

"(1) *Nutritional disorders*

"In this group the average number of treatments given was 28.3 and the average gain in weight was 2.1 lbs. The majority of the children appeared to derive benefit, the signs of improvement noted being related to temperament, energy, sleep and nutrition.

"One boy, noted by his doctor before treatment as being very lethargic, became quite active and able to throw off colds which had been troublesome previously. Another small, puny child, in addition to a considerable gain in weight, appeared to have acquired an ability to digest milk which had been lacking before treatment. A girl, of the nervous type, poor sleeper and very irritable, gained 6½ pounds in weight. Sleep and temperament improved and she was reported after treatment to have been "the only one to escape in the house" when the other inmates contracted influenza.

"These instances point to the general beneficial tonic effect acquired after exposures to artificial sunlight. It must be noted, however, that a considerable number of the children were having, in addition, cod liver oil, Glucose D, etc.

"Two children improved after they had been given free milk and free dinners at school, but disappointing results were noted in some cases where there were indications of faulty hygiene in the home and lack of co-operation on the part of the parents.

"Acidosis cases reacted well in conjunction with the administration of Glucose D and restriction of fats in the diet. Convalescents gave very satisfactory results and they appeared to require, on the average, a smaller number of treatments than the other types of debility.

"(2) *Respiratory Affections*

"In this group an average of 29 treatments was given, showing an average gain of 2.1 lbs. Catarrhal colds and coughs responded well to treatment and a series of cases referred by Mr. Brian Robinson, the Aural Surgeon, on account of nasal catarrh, diminished resistance to colds, etc., are being given a special vitamin preparation in addition to radiation, but as none of these has yet completed a full course, results cannot be included in this year's report.

"Several cases of bronchitis cleared up completely, one of these being a boy with a history of having had pneumonia six times, and with marked bronchitic signs in the chest. On the other hand, a case of chronic bronchitis with a history dating from three attacks of pneumonia in infancy, while showing improvement in his general condition, showed little or no improvement as regards his bronchitis.

"Six cases of asthma have been under treatment during the year, and, with the exception of one, all showed improvement as regards severity and frequency of attacks. One girl, who at the commencement of treatment in October, 1936, had attacks every three weeks, had had no attack during the four months previous to her discharge in June, 1938.

"In no instance, however, was a complete cure effected. A boy of eight years who has been receiving benefit from radiations off and on since the age of four is now having diastolisation, and it will be interesting to learn if this additional form of treatment will be the means of finally curing him of his asthma.

"(3) *Anaemia*

"As is to be expected in an industrial city, this group is the largest attending for Artificial Sunlight. Mild cases were cured or greatly improved by radiations alone, the average number of doses given being 31.2, but moderately severe cases were found to require as well iron in some form, and a number of children, although showing considerable improvement as regards the anaemia, were found to require further treatment and were transferred to Open Air Schools or to Convalescent Homes.

"The following are instances of severe cases whose blood was examined at the Day Open Air School by Dr. Reynolds and Dr. Sparrow :—

G.W. Haemoglobin 50% Red Cells 2,000,000

This boy had been treated "since birth" for anaemia. Pallor was marked and he suffered from pronounced lassitude. Under treatment with iron and artificial sunlight, his anaemia is definitely improving and whereas 'he always used to sit about, he now takes more interest and plays with other children.'

M.B. Age 12. Haemoglobin 66.
Red Cells 3,940,000
Whites 4,500

This girl after six months' treatment has gained 5½ lbs. and the anaemia is decidedly improving.

J.N. Aged 5. Haemoglobin 65.

Marked pallor at commencement of treatment, accompanied by listlessness and no appetite. Her father is unemployed and she has not been having medicinal treatment. She has been referred for admission to the Day Open Air School, but after 42 treatments the Haemoglobin is now 85.

"It is hoped that it will be possible to carry out haemoglobin estimations at intervals as a routine in all these cases of anaemia.

"(4) *Rickets*

"Only six active cases of rickets were being treated at the end of 1938. All these benefited from treatment, i.e., muscles became firmer and appetite and weight increases were noted. The small number in this group would point to a lessening incidence coupled with the fact that many of the children suffering from rickets in the early stages receive treatment at the Child Welfare Centres.

"(5) *Rheumatism and Rheumatic Diathesis*

"On the whole satisfactory results were obtained but to a varying degree, the best being in cases of muscular rheumatism without intercurrent nervous symptoms, although as a general rule sleep became calmer in the latter type.

"Here again it is difficult to assess results, owing to the fact that medicinal treatment, in addition, was generally found to be necessary.

"(6) *Local Conditions*

"Cervical Glands : no tuberculous glands are treated at these clinics but simple enlargements showed subsidence or diminution in size. One girl, in addition to subsidence in size of cervical and axillary glands, gained 10 lbs. after 21 treatments.

"(7) *Alopecia*

"There were two cases of alopecia. One, a thin nervous boy, after 43 treatments showed a gain of 8 lbs. but there was very slight improvement in the alopecia, while the other, a boy of 13, a strong physical type 'who could cycle to Blackpool and back,' had several patches of alopecia which completely cleared up after 25 treatments."

The results of treatment of cases discharged during the year at Stretford Road Clinic were as follows :—

Cured	30
Improved	34
No change	4
To Open-Air School	4
To Convalescent Homes	2
Treatment interfered with by illness	5
Did not complete course	13

Dr. Mackenzie, who has been dealing with the cases at Ancoats Clinic, has kept a special note of the effect of the rays on the weight of children treated. His results were as follows :—

"51 per cent. have gained weight during the period to an amount exceeding the normal average gain for children of the same age, and during a similar period.

"21 per cent. have gained weight during the period at a rate equal to the normal average for children of the same age.

"21 per cent. have gained weight but at a rate less than the normal average rate for children of the same age.

"7 per cent. showed no gain in weight during the period.

"Although a satisfactory gain in weight is not always attained, I find in the majority of cases an improvement is reported in the general well-being of the child, frequently accompanied by improvement of appetite, sleep and nervous condition when such had previously been defective."

SPEECH DEFECTS

The classes for the treatment of stammering were discontinued at the end of July owing to the retirement of the teacher who undertook the work and pending the appointment of a Speech Therapist.

During the seven months, four classes were held and 36 cases, comprising 33 boys and 3 girls, were given a course of treatment. The number of children requiring a second course was 3 boys and 1 girl.

The results of the treatment are classified as follows :—

Good result	22
Fair but improving	8
Poor result	6

The selection of the cases for treatment was made by the School Medical Officer himself and no case was discharged except on his recommendation.

INFECTIOUS DISEASES

Two sessions per week of one doctor's time are devoted to investigation of outbreaks of infectious diseases in individual schools, particular attention being, as a rule, given to outbreaks of Scarlet Fever or Diphtheria. In the early months of the year there was a large number of cases of Measles, but from April onwards the numbers of all types of infectious diseases have been relatively low.

Dr. H. M. Dick has been responsible for this work in the schools and makes a report on each visit at once to the School Medical Officer. Very close co-operation is maintained with the Public Health Department, actual and suspected cases of infectious ailments being immediately reported.

Dr. Dick reports as follows :—

"During 1938, 81 schools, 91 departments, were visited to investigate outbreaks of infectious diseases, chiefly Scarlet Fever and Diphtheria. During the investigation, 15,518 children were inspected. Diphtheria was most prevalent in the first quarter of the year. The number of cases of Diphtheria in 1938 was 213 less in number than 1937.

"Three children were found to be carriers in school, again a considerable decrease from 1937, when 30 carriers were discovered. There has been a decrease of all the infectious diseases with the exception of Measles, as compared with the previous year."

The following table gives the numbers of cases of the commoner infectious diseases notified from the schools. Some children who do not live in Manchester are inevitably included :—

	Measles	Whooping Cough	Scarlet Fever	Diphtheria	Chickenpox
January	1,835	51	200	107	408
February	1,241	61	156	110	284
March	987	73	157	121	442
April	568	76	152	108	309
May	128	106	139	68	213
June	57	104	92	39	166
July	34	116	107	64	186
August	8	53	65	39	44
September	40	107	119	76	104
October	42	69	105	73	131
November	43	94	101	52	139
December	13	87	104	52	148
	4,996	997	1,497	909	2,573

Cerebro Spinal Fever ..	10
Typhoid Fever	1
Erysipelas	1

The Public Health Department continues the work of Diphtheria Immunisation in schools.

The children of 47 schools had the opportunity of immunisation — 27,610 in all. Of these, 6,928 had a complete course of immunisation, a percentage of 25. The percentage varied in individual schools from 52 to 14.

PHYSICAL EDUCATION

The Organiser of Physical Education to the Education Committee, Mr. F. Smith, submits the following report on the work for the year 1938.

"*Introduction*

"The year 1938 was marked not only by the celebrations for the Centenary of Local Government but also by the outstanding advance in the provision and progress of Physical Education, which was greater than at any other time. This was caused by the drive throughout the country for general physical fitness, which roused public opinion and stimulated the response to whatever opportunities that could be provided.

"In the schools, stress on posture has been continued and endeavours made to further the work by continued attention to carriage throughout the school work, and where the opportunity has arisen, to gain the co-operation of the parents through special talks given through the various Parents' Associations by the Organiser of Physical Education. The number of parents who attend these meetings is comparatively large and the response to the talks has been good with definite results in the schools affected. Points stressed besides posture were sleep and adequate rest, diet, clothing and footwear.

"The problem of clothing and shoes is an important one not only from the safety point of view but to give that vitally important freedom of movement. Not only is movement impeded by excess of heavy clothing, but it is impossible for the teacher to attain correct movement and particularly correct posture through inability to see actually what the body is doing. Again, a child wearing ordinary shoes cannot get the full benefit from the exercises. The foot is more or less static, when encased in heavy leather shoes and only the ankle joint is used and the foot loses its mobility.

"The use of unsuitable clothing and footwear cannot be too strongly deprecated among children using gymnastic apparatus. Improper footwear is definitely unsafe. Outdoor shoes make a child a source of danger to other members of the class, a definite danger to the person supporting either vaults or agility work, besides causing untold damage to apparatus and the floor of the physical training room. Children unable to provide shoes are debarred from the use of apparatus. This, of course, is detrimental to the health of the poorer child, who is usually the person who particularly needs the work. In some schools where this has occurred, the teachers have provided school shoes from a sports fund. As, however, this only applies to individual schools and as in many districts parents have not the means to provide special shoes, it is felt that each school should have some allotment of clothing and shoes made to it.

"Should provision of clothing be made, some method of storage is necessary. In the last Annual Report mention was made of storage cabinets and the one referred to has been made and delivered to St. Mary's Road Central School, where it has been in use for several months. The cabinet has proved its worth and accommodates the clothing and shoes for a class of 42 children admirably. It is, however, desirable to have a system of warm waterpipes running along the back in order to ensure the airing of the clothes.

"As the cost of the storage equipment governs the extent of its supply, every effort is being made to find the cheapest and yet most effective system and different types are being experimented with.

"In some cases, where shoes are brought by the children, the teachers have dealt with the storage problem by means of canvas pockets stretched along the classroom wall. This, of course, is by no means ideal, but it is a solution.

"The Manchester Education Committee was one of the first in the country to realise the value of Physical Education in the school curriculum. From this early beginning great strides have been made and by giving a brief account of the work done to-day, some idea of the necessity for increased scope in the facilities provided and some suggestions for their provision may avoid or solve future problems.

"Physical Education for children starts as soon as they enter either the nursery or infants school and continues until school life is ended. In the Infant School two short lessons are given each day.

"In the Junior School one lesson each day is given. Every effort is made in the Senior School to allot three thirty-minute periods for actual physical training and one for swimming and games.

"The 1933 Syllabus of Physical Training is used in the Infants' and Junior Schools and to a large extent in the "all-range" schools. In the Senior Boys' Schools, the Committee's publication "Gymnastic Tables for Senior Boys" is used.

"In the Senior Girls' Schools the 1933 Syllabus is supplemented by tables specially prepared by the Committee's Organisers.

"The Schemes provide for all the elementary school children in the City and as the children advance through the school the tables are arranged to meet their needs.

"In the Infant and Junior Schools every effort is made to take the work out of doors in suitable weather and where there is the necessary playground space, but in our inclement climate it is very necessary to have a large-sized room so that really vigorous activity can be attained indoors too. Besides, a large part of the work of these children necessitates the use of a piano as well as space and this must therefore be indoors.

"The need arises then for a good playground with a clean even surface, and a room at least 60 feet by 30 feet.

"In overcrowded schools, where halls may be provided, the space is lost to make way for extra classrooms, so that in wet weather only the limited movements possible in classrooms can be taken.

"Therefore, particularly in winter, during long wet spells, it is obvious that activity for the children becomes most limited.

"Credit must be given to the Manchester teachers, especially those in the difficult schools, for many cases they tackle their difficulties most courageously and produce really good work. They show real interest in the work and do their utmost to gain every benefit for their children.

"The Senior, Central and Secondary Schools in their need for more advanced work require apparatus, and this should be housed in either a special Physical Training room or in a fully-equipped gymnasia, where it is possible to have it.

"In the re-organised schools, where space permits, portable apparatus has been supplied, but in course of time as re-organisation progresses it is hoped to equip the schools with complete gymnasia, so that a fully effective scheme of gymnastics can be carried out with all children regardless of the type of school.

"The extension of the senior work to gymnastics necessitates further training of the teachers and adds responsibilities to their work. Response to the courses arranged to prepare the teachers for this work proves their willingness and keenness to tackle it. The training Colleges are fully alive to the development of the work in the schools, and in many cases suitable students who show an aptitude for the work are receiving special training to equip them for posts in Senior Schools with fully equipped gymnasia.

"1. *Games*

"These actually start when the child first begins school, but, if the space is adequate for physical training, it is in most cases sufficient for the early types of games and the minor practices suitable for infants and juniors. The difficulties arise in the provision of the larger spaces required for the major games. These definitely call for good playing spaces. The space, however, is not sufficient in itself, it must be kept in good condition and be well marked, so that the maximum playing time with effective work can be given to the children. It is impossible to get good play on an unmarked pitch. This difficulty of marking grounds effectively prevents the development of a real scheme of games embodying the smaller coaching points, that would develop better play and a better understanding of the major games played.

"A weekly games lesson is usually included in the school time-table, taken, wherever possible, in the parks or on school playing fields, and in some cases in the school playgrounds. Considerable progress has been made during the past three years. Every effort is made to take the children from crowded areas into the open once a week.

"Great praise is due to the members of the Schools' Athletic Federation for their invaluable work in connection with all types of sport.

"2. *Swimming*

"There is close co-operation between the Education Committee and the Baths Committee in the provision of facilities for school children.

"A staff of ten men and five women specialist teachers are employed to teach the children at the various baths in the city. The scheme continues to work very smoothly and the standard of swimming improves each year. Unfortunately the children attending the Wythenshawe schools are unable to take part in the scheme owing to lack of facilities in the area and the distance from the City Baths. In September, four swimming baths were closed. This has severely curtailed the swimming in the areas affected. Efforts were made to accommodate some of the schools elsewhere during the winter, but in summer, when most of the baths time-tables are full, the schools affected will be seriously handicapped.

"3. *Athletics*

"Athletic training is a growing interest in the schools. Where previously children were trained only for running and jumping sports in the summer, more systematic and extensive training is being given throughout the year. This has led to a development of a special Athletic Meeting arranged by the Federation to give scope for inter-school competition to stimulate these athletic practices.

"Praise must be accorded to the members of the Federation for their untiring efforts and the splendid work they are doing.

"4. *Dancing*

"Dancing in the schools shows a steadily improving standard, but the difficulty of persuading boys to take part still exists. Efforts are being made to encourage the boys to take an interest as an asset to carriage and to ease and grace of movement which will prove an advantage generally and help their games.

"The growth of the number of entrants in the Schools' Folk Dance Festival proves how this has stimulated interest in the schools and in many cases overcome the boys' prejudices. The Head Teachers and Teachers who organise and help in this Festival are to be complimented on the good work they have done for the schools.

"*Physical Education in the Schools*

"Good progress is being made in the schools generally and the keen interest of the teachers is shown by the response of the various staffs to Refresher Courses. When visiting schools, the Organisers stress the importance of adequate preparation. It is not sufficient merely to use the syllabus as it is given. Better work would result if the teachers would use the syllabus as a basis only.

"A — *Infant Schools*

"The work in these schools shows an all-round improvement. The teachers on the whole are enthusiastic, as is shown by the amount of apparatus made by them in the form of small models and colourful forms of jumping stands, mats and animals.

"This keenness on the part of the teachers is reflected in the work done by the children. During recent Refresher Courses held for teachers in Infants Schools, 115 teachers attended.

"B — *Junior Schools*

"Much excellent work is being done in the Junior Schools, many of which have been supplied with mats in order to give the older children a chance of preparing for the work which follows in the Senior School. In many schools there is a link between the teachers in the two departments, thus ensuring a continuity of training.

"C — *Senior Schools*

"Senior School work has shown considerable development during the year. In all cases efforts are being made to secure some indoor accommodation for the work, either a hall or a special Physical Training room or gymnasium. Many schools have had the hall cleared of desks and surplus furniture to accommodate the portable apparatus, which is supplied, where space is available.

"In most senior schools a specialist teacher is responsible for the major part of the work, especially where there is apparatus.

"In others, the work is divided between two or three teachers, who take a special interest in the work and have attended training courses to equip them for the work. Special attention has been concentrated on the 'building up' exercises for vaulting and agility to ensure progressive training which in the later classes of the senior school produce advanced work, and give all the children scope to attain some measure of success. Particular emphasis during the courses was given to the necessity for proper clothing, especially footwear. In connection with this, footwork and exercises to develop mobility in the foot were stressed.

"Adequate preparation of lessons was emphasised as an essential to sound progressive work.

"It is difficult sometimes to make teachers realise the full possibilities of the work, and to this end special demonstration lessons for the teachers attending courses were arranged to show the standard of work that can be attained with good and careful teaching.

"D — *Central Schools*

"The teaching in the Boys' Central Schools is done mainly by visiting teachers.

"In the Girls' Central Schools the work reaches a high standard, due largely to the fact that the teachers responsible for the training are permanent members of the school staff. In one case the teacher attended a three months' intensive course, the value of which was proved through her excellent results in the school.

"E — *Secondary Schools*

"Each Secondary School has at least one specialist teacher on the staff and at the following schools there are two :—

Levenshulme High School for Girls
Central High School for Girls
Central High School for Boys
Whalley Range High School for Girls

There is now a gymnasium at each school. New gymnasia are nearing completion at Chorlton High School for Boys and Whalley Range High School for Girls. For these children a gymnasium should be at least 75 feet long and 35 feet wide. It should be possible to play games in the gymnasium and this cannot be done to full advantage in the smaller size.

"There is still the tendency to reduce the amount of time per week when the children reach examination forms. At this period of the child's rapid growth, and in many cases mental stress, every effort should be made to give three periods of 45 minutes duration per week apart from games and swimming. Great improvements have been made in the playing fields for schools.

"The Central High School for Boys playing field at Parrs Wood is now very good and plans for a corresponding field for the girls have been completed.

"The Burnage High School playing field has been improved and extended.

"*Refresher Courses for Teachers*

"Refresher Courses for teachers continue to play an important part in the organisation. Head Teachers realise the value of training courses as an aid to keeping teachers abreast of modern methods and have co-operated willingly by allowing members of their staffs to attend. Many excellent teachers owe their success in the subject to these courses.

"During 1938, six courses were arranged but owing to the national crisis it was only possible to complete two, these were for teachers in Infant Schools and 115 teachers enrolled.

"The other courses have been re-arranged and will be held in the early part of next year.

"*Swimming and Life Saving*

"Swimming and Life Saving instruction has suffered severely during the last three months owing to the closure of four swimming baths, which were taken over by the Air Raid Precautions Department and converted into First Aid Posts. Wherever possible, arrangements were made for children to visit other baths, but owing to distance a great number of children were prevented from taking their usual swimming lessons. Where it has not been possible to send children to the baths, the swimming teachers have visited the schools to give lessons in land-drill and in this way it is hoped to maintain interest and give added confidence and improved style, when the children are able to return to the normal scheme.

"The class teachers and swimming teachers have displayed not only expert knowledge but a keenness and enthusiasm for their work, that shows itself in the excellent results attained by the children in this branch of the work.

"*Conclusion*

"In concluding this report the Organiser of Physical Education desires to express his keen appreciation of all the help and advice of the Director of Education, the Chief Inspector of Schools and the School Medical Officer. It would be impossible to carry on this work without the unfailing help of the Assistant Organisers, whose work maintains contact and progress both in the schools and in the Training Courses for Teachers. He also wishes to place on record the happy co-operation which exists between the organising staff and the teachers, who are so eager to do everything to further progress of the work in the interests of the children."

PROVISION OF MEALS

The following is statistical information regarding the provision of meals and the provision of milk.

MEALS

		Cases	Children
New applications.	Granted free	1,776	3,815
	On payment	105	202
	Refused	181	372
	Total	2,062	4,389
Meals supplied.	Free		2,193,859
	On payment		43,826
	Special Schools		105,971
	Total		2,343,656

Of the total number of meals supplied to children in attendance at the Special Schools, payment of 1d. per meal was made in 58,783 instances.

The number of individual children supplied during the year was 14,252, and the number of children on the meals list at the end of the year was 11,675. This number can be registered as the constant figure throughout the year.

Milk

The total number of bottles of milk supplied during the year was 2,436,968. The number of individual children receiving free milk during the year was 13,260. There is, of course, a scheme in operation whereby every child can be supplied with a daily ration of milk on payment.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN

Blind and Deaf Children

All children of these two groups known to the Department — 23 of the former and 61 of the latter — are placed in suitable residential schools.

In recent years there has been increased concentration of interest on the question of special educational methods for the partially sighted and the partially deaf, and there have been Government reports on both groups.

In last year's Report, some account was given of the two Partially Sighted Classes provided in 1937 in Queen Street School, and of the curriculum.

The use of the gramophone Audiometer has enabled us to discover many cases of slight deafness which had not previously been noticed. A large proportion of those can be and are being cured or improved by appropriate treatment and in so far as such treatment is sufficient, no special educational provision is required.

The Government Report issued during 1938 distinguishes as apart from the totally deaf two groups of children who are to a greater or less degree deaf :—

(1) A group who can remain in ordinary classes in ordinary schools, provided they are given help —
   (*a*) by being placed in a favourable position in the classroom ;
   (*b*) by the use of individual hearing aids ;
   (*c*) by tuition in lip reading ;

(2) A group who do not benefit sufficiently by any of these methods, and are therefore ineducable in ordinary schools.

The accurate discovery and diagnosis of these various types is greatly assisted by, though not entirely dependent upon, the use of a pure-tone audiometer, with which this Department is now equipped. For the purpose, in particular, of selection of a suitable hearing aid, the use of such an instrument is indispensable.

Towards the end of 1938, on the advice of the School Aurist, two children in Elementary Schools were provided with hearing aids for use in school, and careful observation is being made of results. The Report of the Government Committee recommended that no child should be placed in the last group mentioned above until trial of hearing aids had been made : transfer to a special school, that is to say, (except in the case of those who are totally deaf) should be a last resort, after other methods have been tried and proved a failure.

Day Special Classes, it is suggested, should be provided for this last group, either as parts of day deaf schools or in conjunction with residential deaf schools. It would be advantageous in Manchester if such children could be dealt with as day scholars at Henshaw's Institution, but further enquiry as to the numbers of children likely to require such special training as "Partially Deaf" is an indispensable preliminary to concrete proposals.

The results of the increased discovery of these cases made possible by the two audiometers is reflected in the increase in the total of partially deaf stated in the statistical tables, from 9 in 1937 to 27 in 1938. These may not, however, all require teaching in a Special Class but may be dealt with by the special methods referred to above.

Mentally Defective Children

At the end of 1938, 701 children of this type were attending Certified Schools for Mentally Defective Children, 666 in Day Schools, 35 in Residential. The following are the figures for the year :—

	At 31st December, 1937	Admitted in 1938	Discharged in 1938	At 31st December, 1938
Day Special School ..	688	215	237	666
Residential Special Schools..	28	13	6	35

Reference to residential schools is only resorted to in the case of children whose behaviour is difficult or whose home environment is prejudicial to the child's interests. The smallness of the number so referred indicates that serious behaviour problems are not so frequent among defectives as has been too often supposed. It is not, of course, intended to suggest that all the children in Day Special Schools are without serious blemishes in character, but on the average it is true to say that the mental defective is a docile, harmless individual, very sensitive to influence, good or bad, and therefore apt, if the latter predominates in his environment, to drift into undesirable habits. It is questionable whether, apart from this susceptibility to influence, behaviour problems are more common among defectives than normals.

"Ascertainment" of defectives is the first duty stated in the Education Act, 1921, as required of an Authority. In the process of such ascertainment the first responsible person is the teacher, who has daily opportunities for study of the mental calibre of his pupils. The actual diagnosis, however, is in the hands of Medical Officers recognised by the Board of Education — for the purpose — who are members of the School Medical Staff, and it is only when this diagnosis is made that ascertainment is complete. Let it be emphasised, however, that on the teacher falls the responsibility of selecting cases for submission to the Medical Officer.

This ascertainment is not merely for the purposes of education in Special Schools, although that is its prime purpose in the case of such children as are so educable. The M.D. Act contemplates the ascertainment by the Medical Officers of children who, being idiots or imbeciles, cannot ever be educated in Special Schools. Confining attention, however, to the case of those educable in Special Schools, this ascertainment and education is only a preliminary to a decision at the end of the child's Special School career, as to whether the child should then be notified to the Local Authority under the M.D. Act as requiring care in one of the three forms of supervision, guardianship or institutional care. This also is a duty of the Local Education Authority. The Special School is therefore a sifting ground for selecting the child who is unlikely to become an adult who can be trusted to look after himself — one who requires "care, supervision and control" for his own protection or that of others.

It is one of the anomalies of the existing law that it is necessary to certify a child as "mentally defective" to secure him special education. If the Special School succeeds in making him more or less responsible and capable of self-support and self-control he need not be "notified". He then ceases to be technically "mentally defective" although he has been so for some years previously.

This anomaly is one which gives much concern to Certifying Medical Officers and also to teachers, and this among other matters has been under consideration of a Special Committee appointed by the Central Association for Mental Welfare, of which the School Medical Officer is a member. That Committee recommends the abolition of the term "mental defect" as applied to children educable in Special Schools and its reservation for use in connection with the M.D. Act only. Of this report, in which are included many new suggestions, more will be heard later.

AFTER CARE

The arrangements between the Education Committee and the South-East Lancashire Association for Mental Welfare have continued during the last year and the following figures show the amount of work which has been undertaken :—

	Males	*Females*	*Total*
(1) TOTAL CASES REFERRED TO THE SOUTH-EAST LANCASHIRE ASSOCIATION FOR MENTAL WELFARE SINCE JULY, 1936, TO YEAR ENDING 1938 ..	1,270	1,044	2,314

	Males	*Females*	*Total*
(2) TOTAL CASES UNDER SUPERVISION OF SOUTH-EAST LANCASHIRE ASSOCIATION FOR MENTAL WELFARE DURING 1938, i.e., ALL UNDER 18 YEARS OF AGE . .	384	316	707
REINSTATED	4	3	
(3) CASES REPORTED DURING 1938	121	82	203
(4) OF (2) IN REGULAR EMPLOYMENT	180	156	336
(5) NUMBER OF VISITS PAID	532	424	956
(6) NUMBER OF REPORTS MADE	519	402	921
(7) SPECIAL INFORMATION REGARDING CASES IN GENERAL			
Transferred to L.M.H.B.	31	48	79
Unable to trace	—	—	—
Deceased	2	1	3
Out of Area	3	1	4
Over 18 years of age	52	58	110
Total	88	108	196

HIGHEST WAGE FOR MALES	37/-
HIGHEST WAGE FOR FEMALES	39/-
LOWEST WAGE FOR MALES	5/-
LOWEST WAGE FOR FEMALES	8/-

PHYSICALLY DEFECTIVE CHILDREN

The following table shows in convenient form the number of cases of the different types of physical defectives dealt with at the various Special Schools during 1938 :—

	December 31st, 1937	Admitted 1938	Discharged 1938	December 31st, 1938
Soss Moss School for Epileptics . .	83	36	30	89
Manchester Residential School for Cripples (Dr. Rhodes' Home) . .	73	39	43	69
Lancasterian Day School for Cripples . .	165	32	34	163
Manchester Residential Open-Air School for Delicate Children	75	159	139	95
Summerseat Residential Open-Air School for Delicate Girls	33	36	41	28
Crumpsall Day Open-Air School for Delicate Children	256	230	235	251

The Residential and Day Cripple Schools are separately reported upon in pages following.

The Soss Moss School caters for a class of children — the epileptic — even more severely afflicted than the cripple, and with, too often, less probability of cure or relief. Some cases, especially those of children admitted young, do clear up apparently permanently, but epilepsy is a disease in which in a large proportion of cases all that can be anticipated is some palliation of the frequency and severity of the fits by treatment — even this is not always attainable. The most distressing of the results in the worst cases is the strong tendency, often well marked before they leave Soss Moss to deterioration either in intelligence or in control of instinctive tendencies. Some of them become virtually mentally defective and can be certified as such: others, by reason of either the severity of their fits or their own temperamental degeneration, can only be recommended when they leave Soss Moss for admission to Epileptic Colonies.

The three Open Air Schools (2 Residential, 1 Day) continue their useful function of improving the health of large numbers of markedly debilitated children. In these schools the claims of nutrition and rest (including sleep) receive first attention, and while one does not depreciate the value of the open air conditions which gives the schools their name, it may be claimed justifiably that the two principal factors in producing improvement of health are adequate food and adequate rest. Altogether 789 children had the benefit of the Open Air Schools during the year.

SPECIAL SCHOOLS

Manchester Residential School for Crippled Children (Dr. Rhodes' Home)

The work of this school has continued during the year on the usual lines. The new school has accommodation for 84 children, as compared with 120 in the old schools (Swinton House and Parkfield). So large accommodation is not now required, as cases of tubercular bone and joint disease are now dealt with at Abergele. Reference to the Annual Report for 1929 shows that in that year, out of 199 children who passed through the Home in a year, 73 were tubercular. Rickets is still, as it always has been, the disease to show the largest numbers, but the proportion has altered. In 1920, 59 out of 103 cases treated were rachitic, in 1929, 105 out of 199, but last year, as Mr. Telford's report below shows, the proportion is only 30 out of 113. The comparison is still more striking if one excludes the Tubercular cases from the totals for 1920 and 1929.

1920	..	59	Rickets	out of	59	non-tubercular.
1929	..	105	,,	,,	126	,,
1938	..	30	,,	,,	113	,,

The cases of Rickets, in addition, do not show the severity of former days, As Rickets is essentially a dietary disease, resulting from lack of Vitamin D. Calcium and Phosphorus in the food, these figures are striking as giving some evidence of improvement of nutrition in the population, and as rebutting, to some degree at least, some of the more pessimistic utterances so frequently heard on the subject of malnutrition.

Other types of crippling deformity are now more frequently admitted. Formerly most of these had to be dealt with at the Lancasterian School or the Orthopaedic Clinic, but, in the case of children who, besides their paralytic or other deformity, are in general condition below par or come from homes where the living and nutritional conditions are unsatisfactory, the Residential School is of distinct advantage.

Mr. E. D. Telford, F.R.C.S., reports on the work of the school as follows:—

"The number of children in the School on December 31st, 1937, was 73. During the past year 40 new cases were admitted, making a total of 113 children under treatment during 1938.

"These are classified as follows :—

Rickets	30
Anterior Poliomyelitis	20
Spastic Paralysis	17
Scoliosis	8
Deformity of feet	6
Torticollis	4
Various other disabilities	28
	113

"The number discharged during the year was 43. Of these 32 were discharged cured, whilst the condition of the remaining eleven had been much improved by operative treatment or by the fitting of suitable appliances.

"A classification of the 43 cases which were discharged shows :—

Rickets	11
Scoliosis	9
Deformity of feet	6
Anterior Poliomyelitis	4
Spastic Paralysis	3
Torticollis	2
Various other disabilities	8
	43

"Except for a troublesome outbreak of Diphtheritic throats in the early part of the year, the general health of the children has been excellent.

"The number of operations performed by me on children from the School at the Booth Hall Infirmary was eleven."

Lancasterian Day School for Crippled Children

The work of this school continues to be carried out efficiently both from the surgical and the educational point of view, in spite of many handicaps, the chief one of which is the limited accommodation. More room is urgently required for the various forms of treatment given, for dining and resting purposes. The limits of accommodation also produce a considerable waiting list. It is not uncommon for a child who has been recommended for admission to have to wait a year or even more for a vacancy, during which period a certain amount of treatment may be given at the Orthopaedic Clinic or at a Hospital, but usually such treatment is, through irregular attendance, desultory and ineffective.

A Cripple School should be large enough to ensure that there is only a very small waiting list at any one time. The development of the Parrs Wood scheme would make this a possibility and at the same time provide the additional facilities mentioned above as necessary.

The following tables provide the usual information relative to the children in the school during 1938.

School Return for 1938

	Boys	Girls	Total
Number of children on January 1st, 1938	98	68	166
,, ,, admitted during 1938	21	11	32
,, ,, discharged during 1938	17	18	35
,, ,, on rolls on December 31st, 1938	102	61	163

Reasons for discharge

	Boys	Girls	Total
Transferred to ordinary school	5	5	10
,, ,, Dr. Rhodes' Home	2	1	3
,, ,, Abergele	1	1	2
Discharged physically unfit for school	1	—	1
Removed from Manchester	—	1	1
Left over 16 — physically unemployable	1	1	2
Left for work	7	9	16
	17	18	35

Occupations in which the school leavers were placed

	Boys	Girls
Textile Design	1	—
Poster work	3	—
Clock and Watch making (Apprentice)	1	—
Office Work	1	—
Shop Work	1	—
Machining	—	6
Millinery	—	1
Dressmaking	—	1
Finishing Woollens	—	1
	7	9

Surgical Conditions Treated during 1938 at the School

Flat foot and Kyphosis	1
Anterior Poliomyelitis	46
Rickets	10
Scoliosis	11
Congenital Talipes	3
Fragilitas Ossium	2
Brachial Plexus Injury	3
Spastic Paralysis	16
Tuberculosis (Spine, hips, knee, ankle)	35
Congenital disease of the hip	3
Arthritis	6
Congenital Deformities	5
Amputation Cases	5
Osteomyelitis	8
Achondroplasia	1
Injury to Arm	1
Birth Palsy	2
Sprengel Shoulder	1
Spina Bifida	1
Fractures	2
Dupuytren's Contracture	1
Total	163

Treatments

Massage	5,371
Medical Gymnastics	4,676
Medical Electricity	3,070
Ultra Violet Rays	5,400
Total	18,517

Miss Nicholls, Principal Teacher, contributes the following :—

"*Lancasterian Old Scholars' Guild*

"The Guild held its 17th Annual Meeting in the School on February 8th, 1939, when tea was provided by the Invalid Children's Aid Association. Mr. H. Platt, F.R.C.S., inspected 88 former scholars — their physical condition and surgical appliances. During the year, Mr. Telford, F.R.C.S., has given 35 consultations to old scholars, ordered 13 surgical boots or appliances for them, operated on one, referred two to other specialists, and seen those scholars who have been sent back to ordinary school at six-monthly intervals. In addition, convalescent treatment was arranged for one old scholar after operative treatment for appendicitis.

"The Old Scholars' Association hopes to extend its social activities by the formation of a club at which hobbies and interests can be cultivated. Members suggested table tennis, needlework and knitting, drawing and painting, dramatic work, discussion and cycling groups.

"Mr. W. O. Lester Smith, the Director of Education, spoke about the fine spirit of the Association and supported the plans for a club by offering to provide suitable accommodation.

ANALYSIS OF THE CRIPPLING DEFECTS OF THE 88 FORMER SCHOLARS

Disease	Boys	Girls	Total
Infantile Paralysis	20	9	29
Rickets	—	2	2
Renal Rickets	—	1	1
Scoliosis	4	3	7
Hemiplegia	5	1	6
Little's Disease	1	—	1
Tubercular Spine	7	4	11
,, Hip	3	2	5
,, Knee	2	7	9
,, Ankle	1	—	1
Amputated Leg	2	1	3
Congenital Dislocation of Hip	—	2	2
,, Talipes Equino — varus	1	1	2
,, Deformity of Feet	—	1	1
Flat Feet	2	—	2
Septic Arthritis	1	1	2
Arm Paralysis	3	—	3
Osteomyelitis	1	—	1
	53	35	88

THE FOLLOWING TABLE SHOWS HOW THE 88 FORMER SCHOLARS ARE ENGAGED

	Boys	Girls	Total
Unemployed	2	2	4
Unemployable — physical defects	2	—	2
At School of Art	1	—	1
Employed	48	33	81
	53	35	88

Employed Boys

Occupation	No.	Wages, weekly unless otherwise stated
Insurance Inspector	1	£300 per annum
Assistant Departmental Manager	1	£240 per annum
Office Work	8	18/- to £3
Textile Design	9	Varies to £3 5s.
Printer's Proof Reader	1	£3 17s. 6d.
Boot Repairer	1	Own business
Newspaper and Tobacconist	1	Own business
Watchmaker	1	Own business
Poster — painter — learners	2	11/- to 14/9d.
Telephone Switchboard	1	£1 15s.
Optical Frame Maker	1	£1 15s.
Salesman	5	Varies to £2 18s. 6d.
Butcher — learners	2	£1
Apprenticed to Electrical Works	1	10/-
,, ,, Photography	1	—
,, ,, Dental Mechanics	1	10/-
,, ,, Sign Writing	1	£1 2s.
,, ,, Wood Engraving	1	£1 2s. 6d.
,, ,, Watchmaking	1	7/6d.
Wire work	1	—
Lift Attendant	1	19/6d.
Warehouseman	1	15/-
Bath Attendant — Stores	1	£2 15s.
Screen covering and upholstery — learners	2	10/- to 15/6d.
Ferranti's — lathe work	1	£4
Dental Mechanic	1	£2
	48	

Employed Girls

Occupation	No.	Weekly wages
Office Work	6	12/6d. to £3
Machining	7	To 30/- and piecework
Knitting	2	31/-
Boxmaking	1	15/-
Embroidery	2	25/- and 30/-
Saleswoman	1	23/-
Fine Needlework	2	to £2
Cigarette packing	2	17/- and 29/-
Own shop	1	Comfortably off
Corset making	1	30/-
Finishing woollens	2	27/-
Switchboard operator	1	30/-
Tailoring — buttonholing	1	—
Tailoring — pressing	1	10/-
Rubber Works	1	26/-
Apprenticed to tailoring	1	10/-
,, ,, millinery	1	10/-
	33	

“*After Care Work*

“The Care Committee work of the Invalid Children’s Aid Association for the Lancasterian School has now been extended to include the cripple over school age. A Sub-Committee, known as the Cripples’ Welfare Sub-Committee, has been formed to deal with the employment difficulties of the boys and girls who leave the Cripple Schools of the Manchester Education Committee.

“The Sub-Committee started work in September, 1938, and consists of the School Medical Officer, representatives of Invalid Children’s Aid Association voluntary workers, Invalid Children’s Aid Association officials and representatives of the Executive Committee, the Matron of Dr. Rhodes’ Home, representatives of the Juvenile Employment Bureaux of the Manchester Education Committee, an old scholar of the Lancasterian School, under the chairmanship of Miss Nicholls, Head Teacher of the Lancasterian School.

“Since the formation of the Committee, thirty-eight cripples have been referred for placing or supervision. Sixty-six visits have been paid to the homes, twenty-five to employers and it is gratifying to be able to report that employment has been found for twelve cripples. The following lists give details of the placings.

Placed by I.C.A.A. and in co-operation with the Juvenile Employment Bureaux

Boys	Watchmaking	1
	Screen making	2
	Entered for training in tailoring. Apprenticeship later	1
Girls	Finishing Woollens	2
	Flower making	1
	Machining	1

Found own posts

Boys	Errand boy	1
	Assembler	1
Girls	Machining	1
	Finishing woollens	1
	Surgical dressings	1

“Several of the boys and girls have been helped with clothing in order to start work, and a good deal of exploration with regard to employment has been done, with one or two very good results.”

CHILD GUIDANCE CLINIC

It will be remembered that responsibility for the maintenance of this Clinic was assumed in September, 1937, by the Education Committee, and the working of the Clinic is recognised as one of the functions of the School Medical Service.

The Clinic is still located in the uppermost storey of Atherton Street School, not under ideal conditions, and the question of securing better premises is one which calls for attention in the early future. The staff is as in the previous year. Besides carrying out the work of the Clinic, one of the psychologists and the psychiatrist pay a weekly visit to the Remand Home to examine and report upon cases for whom a report has been requested by the magistrates.

Dr. Burbury's report follows :—

"During the year 1938 the work of the clinic has developed considerably, and it is now possible to describe it in more detail than previously.

"This year 123 cases were referred, and 52 were carried over from the previous year. This means that we are seeing an average of three new cases a week when the clinic is in session. In the normal course of events we arrange to see four, but for a variety of reasons, a number fail to attend. Of the cases referred, the largest group are from the Education Committee, either through the School Medical Officer or from the Assistant Medical Officers, from the school clinics, or from the Head Teachers. The next group is from the Juvenile Court, either directly or indirectly via the Probation Officer, or via the Remand Home. We are also getting cases from hospitals, private doctors, the Maternity and Child Welfare Department, and from parents themselves. We feel that these last two groups, though small, are very important, since in this way we get a number of children under school age, and therefore get in touch with the problems at early stages.

"*Problems referred*

"The headings under which the problems referred are grouped are those suggested by the Child Guidance Conference in 1937, and they include the following types of case :—

Nervous Disorders — Fears, nightmares, shyness, timidity, etc.
Habit Disorders — Tics, enuresis, masturbation, nail biting, disorders of sleeping and eating, etc.
Behaviour Disorders — Jealousy, screaming attacks, tempers, lying, destructiveness, truancy, pilfering, etc.
Intellectual Disorders — General backwardness with normal or super normal intelligence. Specific disabilities.

Nervous disorders	18
Habit disorders	14
Behaviour disorders	69
Intellectual disorders	22

"*Disposal*

Still under treatment	44
Still under supervision	34
Advisory only	46
Adjusted or improved	16
Moved from district	15
Referred to other agencies	9
Parents unco-operative	5
Discharged unimproved	3

"In the disposal of cases referred to us, we have three groups. There are first all the cases that are seen only once and either referred elsewhere or in which some advice is given. These cases we refer sometimes to other agencies, either other schools or Homes, or to other social work associations. Some children are unsuitable for treatment at the Clinic, some of them suffering from conditions of primarily physical type referred to hospitals and convalescent homes, some of them of low grade intelligence sent to special schools or institutions. There are also children who really need no treatment, but simply a word of advice to parents or to another agency, regarding the treatment of the child.

"The second group are the cases which we keep under supervision without actually giving any treatment. This may happen to cases of three categories. A case referred may really be improving or the problem may seem so small as not to necessitate treatment, or the problem may appear not to be primarily of psychological origin. Secondly, there may be great difficulty in attending the clinic, either because the parents are ill or at work and unable to bring the child. The cost of travelling is sometimes a bar, or long distance. Thirdly, we sometimes put a case under supervision in the initial stages because we have no vacancy in which to take the child for treatment. Supervision cases also include some who have been under treatment for a period. We do this by increasing the length of time between interviews, reducing them to once a month or even less often. We find that it is better to do this than to break contact with home and child suddenly. We also see children in groups in the playroom, and this also we regard as treatment by supervision. This may be a way of dealing with children in the initial stages or after a period of treatment when the value of regular contact still seems desirable, either from the point of view of the child or from the point of view of the environment.

"The third method of disposing of cases is to take them on for regular treatment, and this is the main work of the Clinic. This is done by personal interviews with a child at weekly or fortnightly intervals. We have been unable, except in a very few cases, to make the interviews more often than once a week, on account of the demands on our services.

"These personal interviews consist of playing with and talking with the child about his difficulties. Play and drawing are the equivalent with the child of talking with an adult. The child 'talks' by his play and drawing. The child in his play represents his phantasy life, his life of feeling and thought, and he will often reproduce in his play thoughts which he is afraid to express openly, and thoughts which are unconscious in himself but which are nevertheless governing his whole behaviour. Such things as jealousy of brother or sister may be shown in play with dolls or miniature people, fear of school or parents in play with another adult. These are things which he may be afraid to express, lest he should be blamed or punished, and which he is therefore afraid of in himself, lest he should be unable to control his behaviour. This is why the child is often unable to account for his own abnormal behaviour and therefore why he is unable to alter it, even when punished. Free expression of these feelings in the clinic releases the tension within the child so that he has no need to express them in other ways, and since they can, if necessary, be discussed with him, he feels that they are understood and accepted and he has no need to be afraid of admitting them to himself.

"*Play Group*

"The second method of treatment in the clinic is by means of the play group. At present we have only one group working under the supervision of Mr. Evans. This is a group of boys, all of whom show various types of anti-social behaviour. We feel that if we can help these children to behave in a social way with each other in the clinic, that this will help them to adjust outside. We hope shortly to start another group for rather smaller children, and for boys and girls together in another session.

"In a play group children are free to play together or independently, the room is at their disposal and no limits are set except those required for personal safety and for preventing serious damage to property. Often at first children play entirely alone, but gradually will join in group games and become friendly.

"*Psychological Department*

"This department of necessity grows with the needs of the clinic. The work is mainly the actual testing of intelligence and assessing the difficulties of the child in the test situation, which provides us with valuable clues as to the reason for their mal-adjustment, such as fear of failing, lack of self-criticism, inability to attack a problem, as well as real lack of intelligence.

"We should like to be able to re-test all children before they are discharged, but at present time does not permit this.

"*Social Work*

"A large number of visits to schools and homes are paid regularly. These visits are of the utmost value to us since they put us in touch with both the school and the home to see the actual environment from which the child comes, to tell whether he behaves differently in the two situations. We learn also a great deal from chance visits, of the general conditions of the home, and get contact with parents who cannot, and in some cases will not, attend the clinic with the children. Other parents are seen in the clinic and discussions with them often enable them to see the children and themselves in a new light so that they also adjust, and the whole situation improves.

"*Follow Up*

"It sometimes happens that cases which improved while attending, relapse after giving up attendance, and we have therefore instituted a follow up scheme in order to keep track of children for a period. So far as possible, we hope to pay such visits three months, nine months and eighteen months after discharge. At present most cases have been visited only once and a few twice."

Satisfactory and much improved	1 visit	16
Improved	1 visit	2
Relapsed but unwilling to attend	—	1
Satisfactory and much improved	2nd visit	2
Improved	2nd visit	1
No reply	—	1

STYAL COTTAGE HOMES

All the children admitted to Styal Cottage Homes undergo a full routine medical inspection as soon as possible after admission and the medical schedule is the same as that used at elementary school routine medical inspections. All the children resident in the Homes are also fully examined as soon as possible in a new year and all are periodically examined throughout the year. The following table shows the number of cases of disease or defect observed at the first routine medical examination :—

Disease or Defect	No. of Cases
Skin disease	14
Eye disease	2
Heart and circulatory diseases	12
Suspected pulmonary disease	2
Nervous diseases	2
Rickets	2
Total	34

A Consultant Oculist visits the institution periodically to prescribe treatment for any case of eye disease and to prescribe glasses where necessary in cases of defective vision. Twenty cases of defective vision were submitted last year and glasses were prescribed and obtained in 15 instances.

A small hospital is attached to the institution and in this building is a minor ailments clinic for the children in the institution. During the year there were treated 6 cases of scabies, 77 cases of other skin disease, 18 cases of eye disease, 24 cases of ear disease and 168 cases of minor injuries, bruises, sores, etc.

During the year 16 children received operative treatment for enlarged tonsils and adenoids, one for a mastoid and one a plastic operation to a post-operative mastoid scar.

The following cases of infectious diseases occurred during the year. Nine cases of Chickenpox, 48 cases of Mumps, 1 case of Measles, 1 case of Whooping Cough and 5 cases were found on admission to the Homes to be carriers of the Diphtheria bacillus.

A number of the children were inmates of the hospital whilst suffering from Influenza, Bronchitis and other conditions which could be treated at a hospital not requiring constant medical supervision.

SCHOOL CAMPS

Throughout the year many thousands of scholars in the Manchester schools enjoy the benefits of open air life by visits to camps. The visits vary in length according to the type of camp and the organisation responsible for its administration. The Education Committee provides school camps where the children have the benefit of open air whilst receiving education and also camps which are in occupation from Friday evening after school until Monday morning. Many voluntary organisations in the city provide a week's holiday in camp for necessitous children. In most of these arrangements, the School Medical Service is asked to supply a medical officer to examine the children before departure as to their suitability for camp life and also their apparent freedom from infectious or contagious disease. The question of personal cleanliness receives particular attention and the threat of rejection is always used in cases of uncleanliness. This threat invariably results in a child being put into a cleanly state and all cases referred for attention are re-inspected before they are allowed to join the party. The inspection usually takes place two days before date of departure in order to give time for the unsatisfactory to receive attention. In addition, the parents are asked to give a written guarantee just before the child's departure that to their knowledge no case of infectious disease, i.e., measles, whooping cough, scarlet fever, diphtheria, mumps, chickenpox, has occurred in the household during the preceding four weeks.

The Jewish Community provides a camp for its children and the services of the School Medical Department are given to them also.

NURSERY SCHOOLS

At the two Nursery Schools, which together have accommodation for 165 children, 219 entrants were examined during 1938. Of that number, 79, rather over one-third, were found to require some kind of treatment. In addition, 1,188 re-inspections were carried out, each school being visited monthly by the Medical Officer responsible. The admission examination revealed 9 cases of squint, 3 of otitis media, 34 nasal and throat conditions (mostly catarrh, but including a few cases of adenoids and enlarged tonsils), 4 bronchitis and 12 rickets.

The Shakespeare Street School, which holds 45 children, is reported upon by Dr. E. Calderwood Smith :—

"The large waiting list of over eighty makes it imperative that entrants should be chosen carefully. Those given prior claim are recommended either by private doctors (four this year), by hospitals, or the Infant Welfare Department, or are chosen because they are from poor, overcrowded homes.

"The Nursery School tends to become a family habit. At present there are sixteen families with two children in the school and two with three children.

"The entrant examination, mostly of children round about two years of age, showed a large number of minor defects. Nine were slightly subnormal in nutrition — coming into the C group — four of these from very poor homes, and the others malnourished through defect or illness. Among those examined, twelve showed a slight degree of rickets and nine had sufficiently marked rachitic disease to require treatment.

"Out of the forty-seven children in school, two only have perfect teeth, but the average is only three carious.

"Habit-training has to be intensively carried out in school with these young infants, but in three months time at most good habits are established. Nasal catarrh is as usual the outstanding defect, but treatment in school has very good results.

"Otorrhoea is fairly prevalent, six children being under treatment at the clinic for this condition. The proximity of the clinic to the school is a great advantage, as daily treatment of otorrhoea and severe impetigo is easily carried out. Two of the leavers at Christmas were cured of otorrhoea after 12 to 18 months treatment.

"A large percentage of the children has enlarged tonsils and adenoids but these mostly improve without specific treatment. The routine nasal drill and exercises practised in school produce noticeable improvement even in obstinate mouth-breathers.

"From personal observation, I think the most striking improvement in the year is in the nervous make-up of the nursery school child. Habit-training, regular sleep and sensible food ; above all, child companionship and trained supervision, seem to cure most child neuroses in six months at a maximum. Among those whose improvement in bodily and mental health is most noticeable are three who were sent for mental instability.

Two have had convulsions and the third is a pseudo-epileptic, whose mother is mentally diseased.

"During the year one child, from a very poor home, has had measles and whooping cough but shows no ill-effects. The total number who have had measles this year is four, none serious. There has been one case of scarlet fever and one of diphtheria, both infections contracted in the home, and three cases of mumps have occurred.

"It is noteworthy that of the thirty-six children who returned after the summer vacation, sixteen had lost weight and seven were stationary, surely a potent argument in favour of the value of the nursery school."

Dr. Melville reports on Palmerston Street Nursery School as follows :—

"Of the 167 children examined as routines, 70 were found to have some ailment requiring treatment. This is a percentage of 42, but more than half of these cases were minor skin conditions and nasal catarrh. Only 6 out of the 167 examined were found to have any marked degree of rickets.

"The waiting list remains fairly constant at 115-120, which means that the school could be filled over again. A peculiar feature of the waiting list is the great preponderance of boys.

"Admittance is made, as far as possible, in strict rotation except where a child is known to be delicate and the home conditions unsuitable. The ideal is, of course, that 'the primary object of the nursery school is the physical and medical nurture of the *debilitated* child,' but the great length of the waiting list and the domestic conditions in the area served by the school make it difficult to adhere strictly to this.

"Many of the homes have suffered from the effects of long periods of unemployment, rendering it necessary for the mothers to become the breadwinners. The alternatives for such mothers are to leave the toddlers at home or send them to the nursery school. At home the child must be left in the care of an elderly relative or busy neighbour in small homes where supervision and training must necessarily be quite inadequate and where any freedom of movement in the open air is made impossible by the constant traffic in the streets which are the child's only playground.

"In the nursery school the mother is assured that he is spending the greater part of his waking day in almost ideal conditions. He eats, sleeps and plays under trained and sympathetic supervision. He learns and adapts himself to the regular daily routine so necessary for the comfort and progress, both mental and physical, of the 'under fives'. Food is suitably chosen and varied — sleep is regular and undisturbed by outside noises — in play his senses and muscles are trained by specially designed toys and appliances — he is allowed to satisfy, as far as is safe, his natural curiosity unhampered by the succession of 'don'ts' to which he is accustomed at home. He learns that a policy of 'give and take' is essential in a group of fellow human beings — personal psychological idiosyncrasies are noted and guided. A very noisy, spoilt child of under three who had made life unbearable at home by his tantrums and demands for attention, surprised his teachers and most of all his mother by the rapidity of his reform after two days of trial exhibitions of his tactics. If truth be told, his mother appeared disappointed that the cure of the 'bad nerves' from which she alleged he suffered should have been effected so quickly and simply by outside influences.

"The physical condition of the 'leavers' continues to be a satisfactory index of the bodily improvement that invariably follows attendance for any length of time at the nursery school. At the final medical inspection which I make it a rule to carry out just before the children leave the school, many of the mothers beg me to get permission for their children to stay longer. This permission was granted with very satisfactory results in one exceptional case of a very backward child who would normally have become one of a large class in an ordinary school where much individual attention would have been impossible. In the nursery school she has been encouraged to do things for herself — she 'keeps house', washes, bakes and dusts. Her muscle co-ordination and ability to carry out performance tests have improved enormously. She is happy and contented.

"If such children could be allowed to stay at the nursery school until they were seven and then pass straight to the special schools, I feel that much wasted time and much unhappiness to the individual child could be saved."

SECONDARY SCHOOLS

The routine medical inspection of students attending the secondary schools has been carried out in the same manner as in former years.

The number of students inspected in routine was 2,213, compared with 2,151 in the previous year, while the percentage found to require treatment was 22.5, as against 23 per cent. in the previous year. The findings of medical inspection did not differ greatly from those of the previous year, the greatest number of defects found to require treatment coming under the heading of Defective Vision.

The treatment of secondary school students at the school clinics shows an increase in the number desiring treatment at these institutions, particularly as regards those of minor ailments. The number treated during 1938 was 283, as compared with 173 in the previous year. The treatment of other conditions, i.e., defective vision, postural defects and dental treatment of "specials" remains about the same.

It has not yet been found possible to include the students attending the secondary schools in the scheme of routine dental inspection and treatment. These questions will have to be considered when the dental scheme for the whole of the city has been completed.

DAY CONTINUATION AND JUNIOR TECHNICAL SCHOOLS

Owing to various causes, it was not found possible to complete the whole of the annual routine medical inspections in the schools, and the students attending the Day Continuation and Junior Technical Schools suffered in consequence. The total inspected, including "special" cases going to the clinics for attention to some condition arising during the year, was 921, as compared with 1,174 in the previous year. The percentage of defects found was 28.1, against 16. 9 per cent. in the year 1937. The conditions which show an increase in number are (a) other skin diseases, (b) other conditions of nose and throat defects, and (c) anaemia. In the year 1937 six cases of anaemia were noted, but only one was considered to be of such gravity as to be recommended to seek treatment. In the present year ten cases of anaemia were referred for treatment.

The number of those students availing themselves of clinic treatment is about the same as in the previous year, minor injuries, sores, etc., forming the largest group.

JUNIOR UNEMPLOYMENT CENTRE

In accordance with Section 80 of the Education Act of 1921, arrangements have been made for the medical inspection of boys attending the Junior Unemployment Centre in Heyrod Street.

One half-day each week throughout the year has been devoted to the routine medical inspection of boys attending this Centre. During that period 637 have been examined and 141 were found to require treatment. The diseases or defects found are classified as follows :—

Skin Diseases	16
Eye Diseases	1
Defective Vision	95
Ear Diseases	26
Nose and Throat Diseases	9
Speech Defect	1
Heart and Circulation Diseases	12
Diseases of the Nervous System	1
Deformities	1
Other Defects and Diseases	13
Total Defects	175

In addition, there were 113 defects which required to be kept under observation.

The boys as a rule obtained treatment themselves, only in two or three instances were requests made for treatment at a School Clinic.

EMPLOYMENT OF CHILDREN AND YOUNG PERSONS

The members of the Medical Staff examine all children where application has been made for permission to be employed out of school hours. In all cases where disease or defect is observed and considered to require treatment, the necessary treatment must be provided before the medical certificate is issued.

The following table shows the number examined, and the number and type of cases of disease or defect discovered. The defects found amongst girls desirous of taking part in public entertainment are also included.

No. of children examined during 1938	1,256
No. of children examined and rejected during 1938	4
Reason for rejection	
Organic heart	2
Extreme debility	2
Defects found on examination	
SKIN	
Uncleanliness	2
Scabies	5
Impetigo	5
Other skin diseases	14
	26

EYE	
Blepharitis	4
Conjunctivitis	1
Other conditions	2
Defective vision	57
Squint	1
	65
EAR	
Other ear diseases	10
NOSE AND THROAT	
Chronic tonsillitis	3
Chronic tonsils and adenoids	1
	4
HEART AND CIRCULATION	
Organic	5
Functional	2
Anaemia	6
	13
LUNGS	
Bronchitis	3
Other non-Tuberculous diseases	9
	12
TUBERCULOSIS	
Other forms	1
NERVOUS SYSTEM	
Chorea	1
Other forms	1
	2
DEFORMITIES	
Spinal curvature	3
Other forms	2
	5
OTHER DEFECTS AND DISEASES	18

MEDICAL EXAMINATION OF SCHOLARSHIP CANDIDATES, COLLEGE STUDENTS, ETC., AND OTHER MISCELLANEOUS MEDICAL EXAMINATIONS

During the year the Medical Officers of the Department examined 711 cases under this heading. In the case of newly appointed teachers and students the examination is lengthy and an appreciable amount of a Medical Officer's time is absorbed by these examinations. All cases found to require treatment are followed up until the condition is considered satisfactory.

The following are some particulars connected with these examinations.

(*a*) Student teachers, scholarship candidates, student nurses, etc.	123
(*b*) Entrants to and leavers from the College of Domestic Economy	122
(*c*) Newly-appointed teachers	192
(*d*) Appointment of officials and other miscellaneous examinations of officials and teachers	274
Total	711
Re-examinations in connection with the above mentioned groups	30

SPECIAL REPORTS

A special report by Mr. Brian Robinson, F.R.C.S. (Ed.), the Committee's School Aurist, on the results obtained by diastolisation treatment and the methods employed in giving the treatment will be found on page 25.

Dr. W. R. Honeyburne also makes a special report, "The incidence of Rheumatism in relation to pigmentation of hair and eyes" (see page 38).

FINANCIAL CONTRIBUTIONS TOWARDS COST OF TREATMENT

Parents' contributions towards the cost of medical and dental treatment remain on a voluntary basis. The amounts collected last year are as follows:

	£	s.	d.
Minor Ailments Clinics	292	9	4
Operative Treatment for Adenoids and Enlarged Tonsils ..	59	15	0
Provision of Spectacles under the Committee's Scheme	52	17	0
Payment for Treatment at the Day Open-Air School	281	12	4
Payment for Treatment at the Residential Schools	1,116	19	8
Payment for Treatment by Manchester Corporation Public Health Committee	37	10	0
Transfer in respect of Treatment of Cases from Mobberley Approved School	11	15	0
	£1,852	18	4

CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS, VOLUNTARY ASSOCIATIONS, ETC.

The success of a scheme of medical inspection and treatment depends primarily upon the co-operation of the parents. A resistive or even passive attitude on the part of parents would lead to greatly increased work on the part of the officials, and to a much less valuable result. It has always been an integral part of the scheme in Manchester to solicit the parents' aid, chiefly by explaining the reasons for treatment and the possibilities consequent on non-attention. Experience shows that parents are almost always willing to carry out a Medical Officer's wishes if the reasons for any course are carefully and sympathetically explained and the School Medical Officer believes a large measure of success has attended the efforts of members of his staff in this direction.

The teachers, school attendance officers and the various voluntary associations in the City are ever ready to assist where a child's health is concerned. The list of supervisory duties of both teachers and school attendance officers tends to increase as the years go by and to them the School Medical Officer is grateful for their assistance. Without their aid, many of the branches of the work would be imperfectly carried out. The School Medical Officer wishes also to extend his thanks to the staffs of the voluntary associations within the City for their assistance. Their help lies in so many directions that it would be difficult to give an outline. They, however, do form an important link in a scheme devoted to child welfare.

SUMMARY OF WORK DONE

(ELEMENTARY SCHOOLS)

The following is a summary of the chief items of work done during the year 1938 :—

Children medically examined in school routine	31,712
Children examined as "Specials" in schools and clinics	62,896
Re-inspections (schools and clinics)	127,026
Number of examinations by the school dentists	62,845
Number of treatments by the school dentists	50,385
Number of attendances at the school clinics	503,708
Number of inspections by nurses in regard to uncleanliness	279,203
Number of home visits made by the school nurses	9,976
Number of other inspections in school made by the school nurses	7,924
Number of children inspected in connection with infectious disease outbreaks	15,518

CONCLUSION

It only remains in conclusion to emphasize certain respects in which the service in Manchester is still lacking. Most of these matters have been referred to in previous Reports, and some are alluded to incidentally in the body of this Report.

Since the last Report was issued, some enquiries have been made regarding possible sites for new clinics on the south side of the City and for one in the Clayton area. It is hoped also that 1939 will see a commencement made to the building of the new joint Clinic for the School Medical and Child Welfare Departments at Sharston.

So far as the Medical Service is concerned, every child, in Elementary, Central and Secondary Schools, receives the attention at the hands of the Department that is expected. The same cannot be said of the Dental Service which, owing to the inadequacy of the staff, is far from complete. The establishment of the Clinics mentioned above would go some way to fill up this gap, but there would still be areas in which a Dental Service is not available.

Among other desirable developments are further provision for partially-sighted children, provision for a few partially-deaf, residential accommodation for rheumatic children, and arrangements for orthoptic treatment of squint.

STATISTICAL TABLES

The statistical tables required by the Board of Education are set forth in the following pages and are separately shown for (*a*) ELEMENTARY SCHOOLS ; (*b*) SECONDARY SCHOOLS ; (*c*) DAY CONTINUATION AND JUNIOR TECHNICAL SCHOOLS, AND (*d*) NURSERY SCHOOLS.

The secondary schools and the day continuation and junior technical schools do not, as yet, come within the scheme of routine dental inspection and treatment. Therefore the particulars given in the tables concerning students attending these schools refer to "specials" only.

The requirements of the Board have been fulfilled in showing all the cases of defect known and still requiring treatment at the end of 1937 in the column for "specials" in the table of findings of medical inspection.

TABLE I

MEDICAL INSPECTIONS OF CHILDREN ATTENDING PUBLIC ELEMENTARY SCHOOLS

A — ROUTINE MEDICAL INSPECTIONS

Number of Inspections in the prescribed Groups

Entrants	10,750
Second Age Group	8,552
Third Age Group	7,303
Total	26,605
Number of other Routine Inspections	5,107
Grand Total	31,712

B — OTHER INSPECTIONS

Number of Special Inspections	62,896
Number of Re-inspections	127,026
Total	189,922

C — CHILDREN FOUND TO REQUIRE TREATMENT

Number of individual children found at Routine Medical Inspection to require treatment (excluding Defects of Nutrition, Uncleanliness and Dental Diseases).

GROUP (1)	For defective vision (excluding squint) (2)	For all other conditions recorded in Table II A (3)	Total (4)
Entrants	38	2,450	2,480
Second Age Group	690	1,530	2,079
Third Age Group	573	1,078	1,565
Total (Prescribed Groups)	1,301	5,058	6,124
Other Routine Inspections	287	888	1,138
Grand Total	1,588	5,946	7,262

TABLE II

A — RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED DECEMBER 31st, 1938

DEFECT OR DISEASE	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
(1)	Requiring Treatment (2)	Requiring to be kept under observation, but *not* requiring Treatment (3)	Requiring Treatment (4)	Requiring to be kept under observation, but *not* requiring Treatment (5)
Skin—				
(1) Ringworm — Scalp	—	—	9	—
(2) ,, Body	2	—	96	—
(3) Scabies	38	—	1,111	—
(4) Impetigo	107	—	3,907	—
(5) Other Diseases (Non-Tuberculous)	782	19	4,926	—
Total (Heads 1 to 5)	929	19	10,049	—

DEFECT OR DISEASE	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
(1	Requiring Treatment (2)	Requiring to be kept under observation, but *not* requiring Treatment (3)	Requiring Treatment (4)	Requiring to be kept under observation, but *not* requiring Treatment (5)
Eye—				
(6) Blepharitis	179	—	707	—
(7) Conjunctivitis	67	—	1,509	—
(8) Keratitis	—	—	12	—
(9) Corneal Opacities	11	3	37	—
(10) Other Conditions (excluding Defective Vision and Squint)	51	18	1,608	—
Total (Heads 6 to 10) ..	308	21	3,873	—
(11) Defective Vision (excluding Squint)..	1,588	591	2,586	5,436
(12) Squint	383	82	876	2,240
Ear—				
(13) Defective Hearing	137	24	78	5
(14) Otitis Media	312	23	1,954	—
(15) Other Ear Diseases	282	15	1,838	—
Nose and Throat—				
(16) Chronic Tonsillitis only	207	643	267	8
(17) Adenoids only	78	53	55	1
(18) Chronic Tonsillitis and Adenoids ..	558	220	290	4
(19) Other Conditions	1,016	169	2,925	8
(20) Enlarged Cervical Glands (Non-Tuberculous)	49	74	399	8
(21) Defective Speech	40	107	23	2
Heart and Circulation—				
(22) Heart Disease : Organic	83	120	360	9
(23) ,, Functional	37	149	34	3
(24) ,, Anaemia	253	35	253	4
Lungs—				
(25) Bronchitis	397	168	314	2
(26) Other Non-Tuberculous Diseases ..	57	28	257	3
Tuberculosis—				
(27) Pulmonary : Definite	6	—	4	—
(28) ,, Suspected	19	—	32	—
(29) Non-Pulmonary : Glands	13	—	20	—
(30) ,, Bones and Joints	6	—	41	—
(31) ,, Skin	3	—	2	—
(32) ,, Other Forms ..	5	—	16	—
Total (Heads 29 to 32) ..	27	—	79	—
Nervous System—				
(33) Epilepsy	32	—	102	—
(32) Chorea	26	6	270	2
(35) Other Conditions	90	64	130	5
Deformities—				
(36) Rickets	96	79	113	—
(37) Spinal Curvature	140	67	219	—
(38) Other Forms	344	121	543	4
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)	1,047	487	26,896	34
Total number of defects ..	8,541	3,365	54,819	7,778

B — CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS

AGE-GROUPS	Number of Children Inspected	A (Excellent) No.	A (Excellent) %	B (Normal) No.	B (Normal) %	C (Slightly subnormal) No.	C (Slightly subnormal) %	D (Bad) No.	D (Bad) %
Entrants	10,750	2,159	20.08	7,716	71.78	866	8.06	9	.08
Second Age-Group	8,552	1,288	15.06	6,349	74.24	906	10.59	9	.11
Third Age-Group ..	7,303	1,404	19.22	5,341	73.13	554	7.6	4	.05
Other Routine Inspections.. ..	5,107	1,257	24.61	3,519	68.91	329	6.44	2	.04
Total ..	31,712	6,108	19.26	22,925	72.29	2,655	8.37	24	.08

Mental Deficiency (Notification of Children) Regulations, 1928

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING THE YEAR ENDED DECEMBER 31st, 1938, BY THE LOCAL EDUCATION AUTHORITY TO THE LOCAL MENTAL DEFICIENCY AUTHORITY

Total number of children notified, 137

ANALYSIS OF THE ABOVE TOTAL

N.B. — *No child is entered in more than one section of this table*

Diagnosis	Boys	Girls
1. (*i*) Children incapable of receiving benefit or further benefit from instruction in a Special School:		
(*a*) Idiots	1	7
(*b*) Imbeciles	17	11
(*c*) Others	12	3
(*ii*) Children unable to be instructed in a Special School without detriment to the interests of other children:		
(*a*) Moral defectives	—	—
(*b*) Others	—	—
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16	36	49
3. Feeble-minded children notified under Article 3, i.e., "special circumstances" cases	1	—
Note — No child is notified under Article 3 until the Board have issued a formal certificate (Form 308 M) to the Authority.		
4. Children who in addition to being mentally defective were blind or deaf	—	—
Note — No blind or deaf child is notified without reference to the Board — see Article 2, proviso (ii).		
Grand Total ..	67	70

TABLE III

RETURN OF EXCEPTIONAL CHILDREN IN THE AREA

BLIND CHILDREN

At Certified Schools for the Blind	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
23	—	—	—	23

PARTIALLY-SIGHTED CHILDREN

At Certified Schools for the Blind	At Certified Schools for the Partially Sighted	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
—	17	74	—	—	91

DEAF CHILDREN

At Certified Schools for the Deaf	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
61	—	—	—	61

PARTIALLY-DEAF CHILDREN

At Certified Schools for the Deaf and Partially Deaf	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
—	25	—	2	27

MENTALLY-DEFECTIVE CHILDREN

FEEBLE-MINDED CHILDREN

At Certified Schools for Mentally Defective Children	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
701	181	18	345	1,245

EPILEPTIC CHILDREN

CHILDREN SUFFERING FROM SEVERE EPILEPSY

At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
33	119	—	5	157

PHYSICALLY DEFECTIVE CHILDREN

A — TUBERCULOUS CHILDREN

I — Children Suffering from Pulmonary Tuberculosis

At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
91	—	1	29	121

II — Children Suffering from Non-Pulmonary Tuberculosis

At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
106	82	5	66	259

B — DELICATE CHILDREN

At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
373	1,206	5	—	1,584

C — CRIPPLED CHILDREN

At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
232	560	3	17	812

D — CHILDREN WITH HEART DISEASE

At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
—	253	—	8	261

CHILDREN SUFFERING FROM MULTIPLE DEFECTS

Combination of Defects	At Certified Special Schools	At Public Elementary Schools	At other Other Institutions	At no School or Institution	Total
Blind and epileptic	1	—	—	—	1
Deaf and dumb and crippling defect	—	—	—	1	1

TABLE IV

TREATMENT TABLES

GROUP I — MINOR AILMENTS (excluding Uncleanliness, for which see Table VI)

DISEASE OR DEFECT	Number of Defects treated, or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)
Skin—			
Ringworm — Scalp :			
(i) X-ray Treatment	2	2	4
(ii) Other	5	—	5
Ringworm — Body	95	3	98
Scabies	1,130	19	1,149
Impetigo	3,938	56	3,994
Other skin disease	5,449	226	5,675
Minor Eye Defects—			
(External and other, but excluding cases falling in Group II)	4,037	113	4,150
Minor Ear Defects	4,409	157	4,566
Miscellaneous—			
(e.g., minor injuries, bruises, sores, chilblains, etc.)	25,058	271	25,329
Total	44,123	847	44,970

GROUP II — DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments — Group I)

DISEASE OR DEFECT	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including squint)	10,384	294	10,678
(Operations for squint are recorded separately in the body of the School Medical Officer's Report.)			
Other defect or disease of the eyes (excluding those recorded in Group I)	—	—	—
Total	10,384	294	10,678

Number of Children for whom spectacles were			
(*a*) Prescribed	4,347	215	4,562
(*b*) Obtained	4,042	202	4,244

GROUP III — TREATMENT OF DEFECTS OF NOSE AND THROAT

NUMBER OF DEFECTS

Received Operative Treatment

Under the Authority's Scheme in Clinic or Hospital (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme (2)				Total (3)				Received other forms of treatment (4)	Total number treated (5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
25	30	482	10	64	20	183	12	89	50	665	22	4,503	5,329

(i) Tonsils only
(ii) Adenoids only.
(iii) Tonsils and adenoids.
(iv) Other defects of the nose and throat.

GROUP IV — ORTHOPAEDIC AND POSTURAL DEFECTS

	Under the Authority's Scheme (1)			Otherwise (2)			
	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Total number treated
Number of children treated	112	—	1,404	—	—	105	1,621

TABLE V — DENTAL INSPECTION AND TREATMENT

(1) Number of children inspected by the Dentist —
(*a*) Routine age-groups

Age	5	6	7	8	9	10	11	12	13	14	Total
Number	7,448	5,291	5,451	5,717	5,644	5,375	4,969	4,902	4,662	982	50,441

(*b*) Specials			12,404
(*c*) TOTAL (Routine and Specials)			62,845
(2) Number found to require treatment			47,597
(3) Number actually treated			33,325
(4) Attendances made by children for treatment			50,385
(5) Half days devoted to —			
Inspection	430		
Treatment	4,578	*Total*	5,008
(6) Fillings—			
Permanent Teeth	14,200		
Temporary Teeth	306	*Total*	14,506
(7) Extractions —			
Permanent Teeth	13,934		
Temporary Teeth	47,660	*Total*	61,594
(8) Administrations of general anaesthetics for extractions			7,267
(9) Other Operations —			
Permanent Teeth	3,066		
Temporary Teeth	104	*Total*	3,170

TABLE VI

UNCLEANLINESS AND VERMINOUS CONDITIONS

(i) Average number of visits per school made during the year by the School Nurses	16
(ii) Total number of examinations of children in the schools by School Nurses	279,203
(iii) Number of individual children found unclean	11,502
(iv) Number of individual children cleansed under Section 87 (2) and (3) of the Education Act, 1921	11
(v) Number of cases in which legal proceedings were taken —	
(*a*) Under the Education Act, 1921	3
(*b*) Under School Attendance Byelaws	—

SECONDARY SCHOOLS

TABLE II

A — RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1938

Number examined according to Schedule	2,213
Number of these found to require treatment	497
Number of "Special" Examinations	697
Number of "Re-inspections"	233

DEFECT OR DISEASE	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment
(1)	(2)	(3)	(4)	(5)
Skin—				
(1) Ringworm — Scalp	—	—	—	—
(2) ,, Body	—	—	1	—
(3) Scabies	1	—	4	—
(4) Impetigo	1	—	18	—
(5) Other Diseases (Non-Tuberculous) ..	47	1	21	—
Total (Heads 1 to 5) ..	49	1	44	—
Eye—				
(6) Blepharitis	3	—	4	—
(7) Conjunctivitis	—	—	16	—
(8) Keratitis	—	—	1	—
(9) Corneal Opacities	—	—	1	—
(10) Other Conditions (excluding Defective Vision and Squint)	1	—	20	—
Total (Heads 6 to 10) ..	4	—	41	—
(11) Defective Vision (excluding Squint) ..	261	32	139	221
(12) Squint	9	—	25	10
Ear—				
(13) Defective Hearing	9	1	—	—
(14) Otitis Media	10	—	8	—
(15) Other Ear Diseases	9	—	9	—
Nose and Throat—				
(16) Chronic Tonsillitis only	2	11	1	—
(17) Adenoids only	—	—	—	—
(18) Chronic Tonsillitis and Adenoids ..	8	1	—	—
(19) Other conditions	34	3	25	—
(20) Enlarged Cervical Glands (Non-Tuberculous)	—	2	—	—
(21) Defective Speech	—	2	—	—
Heart and Circulation—				
(22) Heart Disease: Organic	8	7	2	—
(23) ,, Functional	—	8	2	—
(24) ,, Anaemia	8	2	2	—
Lungs—				
(25) Bronchitis	2	1	4	—
(26) Other Non-Tuberculous Diseases ..	6	1	—	—

SECONDARY SCHOOLS

DEFECT OR DISEASE	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment
(1)	(2)	(3)	(4)	(5)
Tuberculosis—				
(27) Pulmonary : Definite	—	—	—	—
(28) ,, Suspected	—	—	—	—
(29) Non-Pulmonary : Glands	1	—	—	—
(30) ,, Bones and Joints	—	—	—	—
(31) ,, Skin	—	—	—	—
(32) ,, Other Forms . .	—	—	—	—
Total (Heads 29 to 32) . .	1	—	—	—
Nervous System—				
(33) Epilepsy	—	—	—	—
(34) Chorea	—	—	2	—
(35) Other Conditions	5	5	6	—
Deformities—				
(36) Rickets	—	—	—	—
(37) Spinal Curvature	16	24	—	—
(38) Other Forms	67	86	2	—
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)	48	14	164	—
Total number of defects . .	556	201	476	231

TABLE IV

TREATMENT TABLES

GROUP I — MINOR AILMENTS (excluding Uncleanliness, for which see Table VI)

DISEASE OR DEFECT	Number of Defects treated, or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)
Skin—			
Ringworm — Scalp :			
(i) X-ray Treatment	—	—	—
(ii) Other Treatment	—	—	—
Ringworm — Body	1	—	1
Scabies	5	—	5
Impetigo	17	—	17
Other Skin Disease	37	27	64
Minor Eye Defects— (External and other, but excluding cases falling in Group II)	34	9	43
Minor Ear Defects— (Treatment for more serious diseases of the ear (e.g., operative treatment in hospital) are not recorded here but in the body of the School Medical Officer's Annual Report)	28	11	39

SECONDARY SCHOOLS

DISEASE OR DEFECT (1)	Number of Defects treated, or under treatment during the year Under the Authority's Scheme (2)	Otherwise (3)	Total (4)
Miscellaneous— (e.g., minor injuries, bruises, sores, chilblains, etc.)	161	—	161
Total	283	47	330

GROUP II — DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments — Group I)

DISEASE OR DEFECT	Number of Defects dealt with Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including squint) (Operations for squint are recorded separately in the body of the School Medical Officer's Report.)	491	40	531
Other defect or disease of the eyes (excluding those recorded in Group I)	—	—	—
Total	491	40	531

DISEASE OR DEFECT	Number of Defects dealt with Under the Authority's Scheme	Otherwise	Total
Number of Children for whom spectacles were			
(*a*) Prescribed	308	36	344
(*b*) Obtained	304	30	334

GROUP III — TREATMENT OF DEFECTS OF NOSE AND THROAT

NUMBER OF DEFECTS

Received Operative Treatment													
Under the Authority's Scheme in Clinic or Hospital (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme (2)				Total (3)				Received other forms of treatment (4)	Total number treated (5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
—	—	—	—	3	—	—	—	3	—	—	—	51	54

(i) Tonsils only.
(ii) Adenoids only.
(iii) Tonsils and adenoids.
(iv) Other defects of the nose and throat.

GROUP IV — ORTHOPAEDIC AND POSTURAL DEFECTS

	Under the Authority's Scheme (1)			Otherwise (2)			
	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Total number treated
Number of children treated	—	—	70	—	—	15	85

SECONDARY SCHOOLS
TABLE V

DENTAL INSPECTION AND TREATMENT

(1) Number of children inspected by the Dentist		*Total*	240
(2) Number found to require treatment			240
(3) Number actually treated			214
(4) Attendances made by children for treatment			346
(5) Half-days devoted to —			
Inspection Treatment	Cannot make accurate apportionment, and therefore included in Elementary Schools.		
(6) Fillings—			
Permanent Teeth	114		
Temporary Teeth	—	*Total*	114
(7) Extractions—			
Permanent Teeth	170		
Temporary Teeth	34	*Total*	204
(8) Administrations of general anaesthetics for extractions			37
(9) Other Operations—			
Permanent Teeth	57		
Temporary Teeth	—	*Total*	57

DAY CONTINUATION AND JUNIOR TECHNICAL SCHOOLS

TABLE II

A — RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED DECEMBER 31st, 1938

Number examined	787
Number of these found to require treatment	221
Number of "Specials" inspected	134

DEFECT OR DISEASE	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment
(1)	(2)	(3)	(4)	(5)
Skin—				
(1) Ringworm — Scalp	—	—	—	—
(2) ,, Body	—	—	—	—
(3) Scabies	—	—	—	—
(4) Impetigo	—	—	5	—
(5) Other Diseases (Non-Tuberculous)	56	—	5	—
Total (Heads 1 to 5)	56	—	10	—
Eye—				
(6) Blepharitis	6	—	3	—
(7) Conjunctivitis	—	—	7	—
(8) Keratitis	—	—	—	—
(9) Corneal Opacities	—	1	—	—
(10) Other Conditions (excluding Defective Vision and Squint)	1	—	8	—
Total (Heads 6 to 10)	7	1	18	—
(11) Defective Vision (excluding Squint)	74	5	9	—
(12) Squint	4	—	—	—

DAY CONTINUATION AND JUNIOR TECHNICAL SCHOOLS

	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
DEFECT OR DISEASE (1)	Requiring Treatment (2)	Requiring to be kept under observation, but *not* requiring Treatment (3)	Requiring Treatment (4)	Requiring to be kept under observation, but *not* requiring Treatment (5)
Ear—				
(13) Defective Hearing	—	—	—	—
(14) Otitis Media	9	—	3	—
(15) Other Ear Diseases	4	—	8	—
Nose and Throat				
(16) Chronic Tonsillitis only	7	1	—	—
(17) Adenoids only	—	—	—	—
(18) Chronic Tonsillitis and Adenoids ..	—	—	—	—
(19) Other Conditions	30	—	10	—
(20) Enlarged Cervical Glands (Non-Tuberculous)	1	—	—	—
(21) Defective Speech	1	1	—	—
Heart and Circulation—				
(22) Heart Disease: Organic	—	1	—	—
(23) ,, Functional	—	—	—	—
24) ,, Anaemia	10	—	—	—
Lungs—				
(25) Bronchitis	2	—	—	—
(26) Other Non-Tuberculous Diseases ..	2	—	—	—
Tuberculosis—				
(27) Pulmonary: Definite	—	—	—	—
(28) ,, Suspected	—	—	—	—
(29) Non-Pulmonary: Glands	—	—	—	—
(30) ,, Bones and Joints	—	—	—	—
(31) ,, Skin	—	—	—	—
(32) ,, Other Forms ..	—	—	—	—
Total (Heads 29 to 32) ..	—	—	—	—
Nervous System—				
(33) Epilepsy	—	—	—	—
(34) Chorea	—	—	—	—
(35) Other Conditions	1	—	—	—
Deformities—				
(36) Rickets	—	—	—	—
(37) Spinal Curvature	2	1	—	—
(38) Other Forms	41	3	—	—
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)	21	2	76	—
Total number of defects ..	272	15	134	—

TABLE IV

TREATMENT TABLES

GROUP I — MINOR AILMENTS (excluding Uncleanliness, for which see Table VI)

DISEASE OR DEFECT	Number of Defects treated, or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)
Skin—			
Ringworm — Scalp :			
(i) X-ray Treatment	—	—	—
(ii) Other	—	—	—
Ringworm — Body	—	—	—
Scabies	—	—	—
Impetigo	5	—	5
Other skin disease	5	27	32
Minor Eye Defects—			
(External and other, but excluding cases falling in Group II)	15	9	24
Minor Ear Defects—			
(Treatment for more serious diseases of the ear (e.g., operative treatment in hospital) are not recorded here but in the body of the School Medical Officer's Annual Report)	10	12	22
Miscellaneous—			
(e.g., minor injuries, bruises, sores, chilblains, etc.)	74	—	74
Total	109	48	157

GROUP II — DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments — Group I)

DISEASE OR DEFECT	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including squint) (Operations for squint are recorded separately in the body of the School Medical Officer's Report.)	38	25	63
Other defect or disease of the eyes (excluding those recorded in Group I)	—	—	—
Total	38	25	63
Number of Children for whom spectacles were			
(*a*) Prescribed	25	16	41
(*b*) Obtained	23	7	30

DAY CONTINUATION AND JUNIOR TECHNICAL SCHOOLS

GROUP III — TREATMENT OF DEFECTS OF NOSE AND THROAT

NUMBER OF DEFECTS

Received Operative Treatment Under the Authority's Scheme in Clinic or Hospital (1)				Received Operative Treatment By Private Practitioner or Hospital, apart from the Authority's Scheme (2)				Total (3)				Received other forms of treatment (4)	Total number treated (5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
—	—	—	—	—	—	—	—	—	—	—	—	19	19

(i) Tonsils only.
(ii) Adenoids only.
(iii) Tonsils and adenoids.
(iv) Other defects of the nose and throat.

GROUP IV — ORTHOPAEDIC AND POSTURAL DEFECTS

	Under the Authority's Scheme (1)			Otherwise (2)			
	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Total number treated
Number of children treated	—	—	41	—	—	—	41

Table V

DENTAL INSPECTION AND TREATMENT

(1) Number of children inspected by the Dentist			18
(2) Number found to require treatment			18
(3) Number actually treated			17
(4) Attendances made by children for treatment			18
(5) Half-days devoted to—			

Inspection Cannot make accurate apportionment, but included
Treatment in Elementary Schools.

(6) Fillings—			
Permanent Teeth	2		
Temporary Teeth	—	*Total*	2
(7) Extractions—			
Permanent Teeth	18		
Temporary Teeth	1	*Total*	19
(8) Administrations of general anaesthetics for extractions			3
(9) Other Operations—			
Permanent Teeth	—		
Temporary Teeth	—	*Total*	—

TABLE II

NURSERY SCHOOLS

A — RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED DECEMBER 31st, 1938

Number examined on admission	219
At that inspection number found to require treatment ..	79
Number of "Special" Inspections	75
Number of "Re-inspections"	1,188

DEFECT OR DISEASE	ROUTINE INSPECTIONS *No. of Defects*		SPECIAL INSPECTIONS *No. of Defects*	
	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment
(1)	(2)	(3)	(4)	(5)
Skin—				
(1) Ringworm — Scalp	—	—	—	—
(2) „ Body	—	—	1	—
(3) Scabies	—	—	—	—
(4) Impetigo	1	—	13	—
(5) Other Diseases (Non-Tuberculous) ..	16	—	11	—
Total (Heads 1 to 5) ..	17	—	25	—
Eye—				
(6) Blepharitis	3	—	3	—
(7) Conjunctivitis	—	—	3	—
(8) Keratitis	—	—	—	—
(9) Corneal Opacities	—	—	—	—
(10) Other Conditions (excluding Defective Vision and Squint)	1	—	3	—
Total (Heads 6 to 10) ..	4	—	9	—
(11) Defective Vision (excluding Squint)	—	—	1	—
(12) Squint	9	2	1	—
Ear—				
(13) Defective Hearing	—	—	—	—
(14) Otitis Media	3	—	7	—
(15) Other Ear Diseases	2	—	—	—
Nose and Throat—				
(16) Chronic Tonsillitis only	4	5	—	—
(17) Adenoids only	1	—	—	—
(18) Chronic Tonsillitis and Adenoids ..	—	2	—	—
(19) Other Conditions	29	2	4	—
(20) Enlarged Cervical Glands (Non-Tuberculous)	2	—	—	—
(21) Defective Speech	—	—	—	—
Heart and Circulation—				
(22) Heart Disease : Organic	—	—	—	—
(23) „ Functional	—	1	—	—
(24) „ Anaemia	—	—	—	—
Lungs—				
(25) Bronchitis	4	1	2	—
(26) Other Non-Tuberculous Diseases ..	8	1	—	—

NURSERY SCHOOLS

DEFECT OR DISEASE (1)	ROUTINE INSPECTIONS No. of Defects: Requiring Treatment (2)	ROUTINE INSPECTIONS No. of Defects: Requiring to be kept under observation, but *not* requiring Treatment (3)	SPECIAL INSPECTIONS No. of Defects: Requiring Treatment (4)	SPECIAL INSPECTIONS No. of Defects: Requiring to be kept under observation, but *not* requiring Treatment (5)
Tuberculosis—				
(27) Pulmonary: Definite	—	—	—	—
(28) ,, Suspected	—	—	—	—
(29) Non-Pulmonary: Glands	—	—	—	—
(30) ,, Bones and Joints	—	—	—	—
(31) ,, Skin	—	—	—	—
(32) ,, Other Forms ..	—	—	—	—
Total (Heads 29 to 32) ..	—	—	—	—
Nervous System—				
(33) Epilepsy	—	—	—	—
(34) Chorea	—	—	—	—
(35) Other Conditions	—	—	—	—
Deformities—				
(36) Rickets	7	5	—	—
(37) Spinal Curvature	—	—	—	—
(38) Other Forms	4	6	—	—
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)	12	8	28	—
Total number of defects ..	106	33	77	—

TABLE IV

TREATMENT TABLES

GROUP I — MINOR AILMENTS (excluding Uncleanliness, for which see Table VI)

DISEASE OR DEFECT (1)	Number of Defects treated, or under treatment during the year: Under the Authority's Scheme (2)	Otherwise (3)	Total (4)
Skin—			
Ringworm — Scalp:			
(i) X-ray Treatment	—	—	—
(ii) Other	—	—	—
Ringworm — Body	1	—	1
Scabies	—	—	—
Impetigo	14	—	14
Other skin disease	27	—	27
Minor Eye Defects	12	1	13
Minor Ear Defects	12	—	12
Miscellaneous	36	1	37
Total	102	2	104

NURSERY SCHOOLS

GROUP II — DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments — Group I)

DISEASE OR DEFECT	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction	10	—	10
Other defect or disease of the eyes..	—	—	—
Total	10	—	10
Number of Children for whom spectacles were			
(*a*) Prescribed	5	—	5
(*b*) Obtained	5	—	5

GROUP III — TREATMENT OF DEFECTS OF NOSE AND THROAT

NUMBER OF DEFECTS

	Received Operative Treatment													
Under the Authority's Scheme in Clinic or Hospital (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme (2)				Total (3)				Received other forms of treatment (4)	Total number treated (5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
—	—	—	—	—	—	—	—	—	—	—	—	38	38

(i) Tonsils only.
(ii) Adenoids only.
(iii) Tonsils and Adenoids.
(iv) Other defects of the nose and throat.

GROUP IV — ORTHOPAEDIC AND POSTURAL DEFECTS

	Under the Authority's Scheme (1)			Otherwise (2)			
	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Residential treatment with education (i)	Residential treatment without education (ii)	Non-residential treatment at an orthopaedic clinic (iii)	Total number treated
Number of children treated	—	—	3	—	—	—	3

TABLE V — DENTAL INSPECTION AND TREATMENT

(1) Number of children inspected by the Dentist — TOTAL (Routine and Specials)			140
(2) Number found to require treatment			71
(3) Number actually treated			50
(4) Attendances made by children for treatment			70
(5) Half-days devoted to— Inspection, Treatment	Cannot make accurate apportionment, but included in Elementary Schools.		
(6) Fillings—			
Permanent Teeth	—		
Temporary Teeth	8	*Total* ..	8
(7) Extractions —			
Permanent Teeth	—		
Temporary Teeth	99	*Total*	99
(8) Administrations of general anaesthetics for extractions			15
(9) Other Operations—			
Permanent Teeth	—		
Temporary Teeth	2	*Total* ..	2

TABLE VI

UNCLEANLINESS AND VERMINOUS CONDITIONS

(i) Average number of visits per school made during the year by the School Nurses	12
(ii) Total number of examinations of children in the schools by School Nurses	427
(iii) Number of individual children found unclean	39
(iv) Number of individual children cleansed under Section 87 (2) and (3) of the Education Act, 1921	—
(v) Number of cases in which legal proceedings were taken—	
(*a*) Under the Education Act, 1921	—
(*b*) Under School Attendance Byelaws	—

DENTAL REPORT re SPECIAL SCHOOLS — DAY AND RESIDENTIAL

TABLE V

DENTAL INSPECTION AND TREATMENT

(1) Number of children inspected by the Dentist—			
(*a*) Routine age-groups			1,181
(*b*) Specials			177
(*c*) TOTAL (Routine and Specials)			1,358
(2) Number found to require treatment			1,031
(3) Number actually treated			811
(4) Attendances made by children for treatment			1,229
*(5) Half-days devoted to—			
Inspection	9		
Treatment	69	*Total*	78
(6) Fillings—			
Permanent Teeth	400		
Temporary Teeth	12	*Total*	412
(7) Extractions—			
Permanent Teeth	310		
Temporary Teeth	960	*Total*	1,270
(8) Administrations of general anaesthetics for extractions			96
(9) Other Operations—			
Permanent Teeth	74		
Temporary Teeth	2	*Total*	76

* Some of the time devoted to these children is unavoidably recorded in Elementary Schools Table but it is known that the half days recorded above were devoted to Special Schools and this is additional to Elementary Schools Table.

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JESSE BROAD *and* COMPANY LIMITED . MANCHESTER